

*Desktop Version (1.43)*

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Search Strategies Release History

# Release History

This document lists changes made to the SWIFT-Review Search Strategies. The [SWIFT-Review Search Strategies](https://www.sciome.com/swift-review/searchstrategies/) documents contain the detailed search strings used in SWIFT-Review to automatically tag documents in various categories of interest to environmental health researchers. Please send your comments and questions about SWIFT-Review Search Strategies to swift-review@sciome.com.

# Version 1.43, Commit a8f69596181: 12.13.2024

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

tiab: ("Palaemon pugio" OR "Daggerblade Grass Shrimp" OR "Faxonius rusticus" OR "Rusty Crayfish" OR "Acromyrmex lundii" OR "Leaf-Cutter Ant" OR "Brachionus ibericus" OR "Rotifer" OR "Aequipecten tehuelchus" OR "Queen Scallop" OR "Diamesa cinerella" OR "Chironomid" OR "Tetrastichus howardi" OR "Eulophid Wasp" OR "Oryzias mekongensis" OR "Mekong Ricefish" OR "Silurus lanzhouensis" OR "Lanzhou Catfish" OR "Trichospilus diatraeae" OR "Wasp" OR "Bathynellidae" OR "Crustaceans" OR "Acartia danae" OR "Calanoid Copepod" OR "Ronderosia bergii" OR "Spur-Throated Grasshopper" OR "Iberolacerta cyreni" OR "Cyren's Rock Lizard" OR "Neocaridina denticulata ssp. sinensis" OR "Japanese Swamp Shrimp" OR "Iguana iguana" OR " Green Iguana" OR "Leptoxis ampla" OR "Round Rocksnail" OR "Heterometrus sp." OR "Lateolabrax maculatus" OR "Spotted Sea Bass" OR "Ameiva ameiva" OR "Giant Ameiva" OR "Tetrahymena mobilis" OR "Ciliate" OR "Xylocopa latipes" OR "Carpenter Bee" OR "Megachile anthracina" OR "Leaf Cutter Bee" OR "Boa constrictor" OR "Boa Constrictor" OR "Megachile disjuncta" OR "Leaf Cutter Bee" OR "Tidarren haemorrhoidale" OR "Tangle Web Spider" OR "Rhinoclemmys pulcherrima" OR "Painted Wood Turtle" OR "Somatogyrus coosaensis" OR "Coosa Pebblesnail" OR "Megachile bicolor" OR "Leaf Cutter Bee" OR "Nassarius dorsatus" OR "Channeled Nassa" OR "Hamiota perovalis" OR "Orangenacre Mucket" OR "Tetrahymena canadensis" OR "Ciliate" OR "Tetrahymena tropicalis" OR "Ciliate" OR "Tetrahymena borealis" OR "Ciliate" OR "Tetrahymena mimbres" OR "Ciliate" OR "Tetrahymena shanghaiensis" OR "Ciliate" OR "Buenoa scimitra" OR "Backswimmer" OR "Tetrahymena americanis" OR "Ciliate" OR "Tetrahymena corlissi" OR "Ciliate" OR "Leaunio umbrans" OR "Coosa Creekshell")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

tiab: ("Nannochloropsis salina" OR "Yellow Green Algae" OR "Navicula recens" OR "Diatom" OR "Nitzschia recta" OR "Diatom" OR "Aulacoseira pusilla" OR "Diatom" OR "Nitzschia dissipata var. dissipata" OR "Diatom" OR "Amphora montana" OR "Diatom" OR "Fragilaria capucina var. mesolepta" OR "Diatom" OR "Nostoc minutum" OR "Blue Green Algae" OR "Anabaena affinis" OR "Blue-Green Algae" OR "Phormidium ambiguum" OR "Blue-Green Algae" OR "Nasturtium officinale" OR "Watercress" OR "Chlorella thermophila" OR "Green Algae" OR "Sarcodia suiae" OR "Red Algae" OR "Vallisneria denseserrulata" OR "Eelgrass" OR "Agave sisalana" OR "Sisal" OR "Caulerpa lentillifera" OR "Green Algae" OR "Palaemon pugio" OR "Daggerblade Grass Shrimp" OR "Faxonius rusticus" OR "Rusty Crayfish" OR "Acromyrmex lundii" OR "Leaf-Cutter Ant" OR "Brachionus ibericus" OR "Rotifer" OR "Aequipecten tehuelchus" OR "Queen Scallop" OR "Diamesa cinerella" OR "Chironomid" OR "Tetrastichus howardi" OR "Eulophid Wasp" OR "Oryzias mekongensis" OR "Mekong Ricefish" OR "Silurus lanzhouensis" OR "Lanzhou Catfish" OR "Trichospilus diatraeae" OR "Wasp" OR "Bathynellidae" OR "Crustaceans" OR "Acartia danae" OR "Calanoid Copepod" OR "Ronderosia bergii" OR "Spur-Throated Grasshopper" OR "Iberolacerta cyreni" OR "Cyren's Rock Lizard" OR "Neocaridina denticulata ssp. sinensis" OR "Japanese Swamp Shrimp" OR "Iguana iguana" OR " Green Iguana" OR "Leptoxis ampla" OR "Round Rocksnail" OR "Heterometrus sp." OR "Lateolabrax maculatus" OR "Spotted Sea Bass" OR "Ameiva ameiva" OR "Giant Ameiva" OR "Tetrahymena mobilis" OR "Ciliate" OR "Xylocopa latipes" OR "Carpenter Bee" OR "Megachile anthracina" OR "Leaf Cutter Bee" OR "Boa constrictor" OR "Boa Constrictor" OR "Megachile disjuncta" OR "Leaf Cutter Bee" OR "Tidarren haemorrhoidale" OR "Tangle Web Spider" OR "Rhinoclemmys pulcherrima" OR "Painted Wood Turtle" OR "Somatogyrus coosaensis" OR "Coosa Pebblesnail" OR "Megachile bicolor" OR "Leaf Cutter Bee" OR "Nassarius dorsatus" OR "Channeled Nassa" OR "Hamiota perovalis" OR "Orangenacre Mucket" OR "Tetrahymena canadensis" OR "Ciliate" OR "Tetrahymena tropicalis" OR "Ciliate" OR "Tetrahymena borealis" OR "Ciliate" OR "Tetrahymena mimbres" OR "Ciliate" OR "Tetrahymena shanghaiensis" OR "Ciliate" OR "Buenoa scimitra" OR "Backswimmer" OR "Tetrahymena americanis" OR "Ciliate" OR "Tetrahymena corlissi" OR "Ciliate" OR "Leaunio umbrans" OR "Coosa Creekshell")

# Version 1.43, Commit 52ce7b21e9b: 09.10.2024

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

tiab: ("Palaemon pugio" OR "Daggerblade Grass Shrimp" OR "Faxonius rusticus" OR "Rusty Crayfish" OR "Acromyrmex lundii" OR "Leaf-Cutter Ant" OR "Brachionus ibericus" OR "Rotifer" OR "Aequipecten tehuelchus" OR "Queen Scallop" OR "Diamesa cinerella" OR "Chironomid" OR "Tetrastichus howardi" OR "Eulophid Wasp" OR "Oryzias mekongensis" OR "Mekong Ricefish" OR "Silurus lanzhouensis" OR "Lanzhou Catfish" OR "Bathynellidae" OR "Crustaceans" OR "Trichospilus diatraeae" OR "Wasp" OR "Acartia danae" OR "Calanoid Copepod" OR "Iberolacerta cyreni" OR "Cyren's Rock Lizard" OR "Neocaridina denticulata ssp. sinensis" OR "Japanese Swamp Shrimp" OR "Lateolabrax maculatus" OR "Spotted Sea Bass" OR "Iguana iguana" OR " Green Iguana" OR "Ameiva ameiva" OR "Giant Ameiva" OR "Boa constrictor" OR "Boa Constrictor" OR "Tidarren haemorrhoidale" OR "Tangle Web Spider" OR "Rhinoclemmys pulcherrima" OR "Painted Wood Turtle" OR "Nassarius dorsatus" OR "Channeled Nassa" OR "Buenoa scimitra" OR "Backswimmer")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

tiab: ("Nannochloropsis salina" OR "Yellow Green Algae" OR "Navicula recens" OR "Diatom" OR "Nitzschia recta" OR "Diatom" OR "Aulacoseira pusilla" OR "Diatom" OR "Nitzschia dissipata var. dissipata" OR "Diatom" OR "Fragilaria capucina var. mesolepta" OR "Diatom" OR "Amphora montana" OR "Diatom" OR "Nostoc minutum" OR "Blue Green Algae" OR "Phormidium ambiguum" OR "Blue-Green Algae" OR "Nasturtium officinale" OR "Watercress" OR "Chlorella thermophila" OR "Green Algae" OR "Agave sisalana" OR "Sisal" OR "Sarcodia suiae" OR "Red Algae" OR "Palaemon pugio" OR "Daggerblade Grass Shrimp" OR "Faxonius rusticus" OR "Rusty Crayfish" OR "Acromyrmex lundii" OR "Leaf-Cutter Ant" OR "Brachionus ibericus" OR "Rotifer" OR "Aequipecten tehuelchus" OR "Queen Scallop" OR "Diamesa cinerella" OR "Chironomid" OR "Tetrastichus howardi" OR "Eulophid Wasp" OR "Oryzias mekongensis" OR "Mekong Ricefish" OR "Silurus lanzhouensis" OR "Lanzhou Catfish" OR "Bathynellidae" OR "Crustaceans" OR "Trichospilus diatraeae" OR "Wasp" OR "Acartia danae" OR "Calanoid Copepod" OR "Iberolacerta cyreni" OR "Cyren's Rock Lizard" OR "Neocaridina denticulata ssp. sinensis" OR "Japanese Swamp Shrimp" OR "Lateolabrax maculatus" OR "Spotted Sea Bass" OR "Iguana iguana" OR " Green Iguana" OR "Ameiva ameiva" OR "Giant Ameiva" OR "Boa constrictor" OR "Boa Constrictor" OR "Tidarren haemorrhoidale" OR "Tangle Web Spider" OR "Rhinoclemmys pulcherrima" OR "Painted Wood Turtle" OR "Nassarius dorsatus" OR "Channeled Nassa" OR "Buenoa scimitra" OR "Backswimmer")

# Version 1.43, Commit 296e7200188: 06.18.2024

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Palaemon pugio" OR Daggerblade Grass Shrimp" OR "Faxonius rusticus" OR Rusty Crayfish" OR "Oryzias mekongensis" OR Mekong Ricefish" OR "Silurus lanzhouensis" OR Lanzhou Catfish" OR "Acartia danae" OR Calanoid Copepod" OR "Neocaridina denticulata ssp. sinensis" OR Japanese Swamp Shrimp" OR "Iguana iguana" OR Green Iguana" OR "Ameiva ameiva" OR Giant Ameiva" OR "Boa constrictor" OR Boa Constrictor" OR "Rhinoclemmys pulcherrima" OR Painted Wood Turtle" OR "Tidarren haemorrhoidale" OR Tangle Web Spider" OR "Buenoa scimitra" OR Backswimmer")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Nitzschia dissipata var. dissipata" OR "Diatom" OR "Fragilaria capucina var. mesolepta" OR "Diatom" OR "Amphora montana" OR "Diatom" OR "Nostoc minutum" OR "Blue Green Algae" OR "Chlorella thermophila" OR "Green Algae" OR "Palaemon pugio" OR "Daggerblade Grass Shrimp" OR "Faxonius rusticus" OR "Rusty Crayfish" OR "Oryzias mekongensis" OR "Mekong Ricefish" OR "Silurus lanzhouensis" OR "Lanzhou Catfish" OR "Acartia danae" OR "Calanoid Copepod" OR "Neocaridina denticulata ssp. sinensis" OR "Japanese Swamp Shrimp" OR "Iguana iguana" OR "Green Iguana" OR "Ameiva ameiva" OR "Giant Ameiva" OR "Boa constrictor" OR "Boa Constrictor" OR "Rhinoclemmys pulcherrima" OR "Painted Wood Turtle" OR "Tidarren haemorrhoidale" OR "Tangle Web Spider" OR "Buenoa scimitra" OR "Backswimmer")

# Version 1.43, Commit f85e6b7b75e: 03.19.2024

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Oryzias mekongensis" OR "Mekong Ricefish")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Oryzias mekongensis" OR "Mekong Ricefish")

# Version 1.43, Commit b7dbb0ab1a8: 01.17.2024

## Updated Epidemiologic Quantitative Analyses Evidence Stream category

1. The Evidence Stream category, Epidemiologic Quantitative Analyses) was updated to correct an error in the previous query in line 1, and before the first “AND” operator:

mesh\_mh:( humans OR "human development" ) OR tiab: (human\* OR person\* OR people) OR was corrected to:

(mesh\_mh:( humans OR "human development" ) OR tiab: (human\* OR person\* OR people) OR

1. The Evidence Stream category, Epidemiologic Quantitative Analyses) was updated to correct an error in the previous query before the first “AND” operator:

mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*) was corrected to:

mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*) )

# Version 1.43, Commit 6ef09528680: 12.18.2023

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Amphipholis kochii" OR "Brittle Star" OR "Trematomus newnesi" OR "Dusky Rockcod" OR "Centrostephanus rodgersii" OR "Sea Urchin" OR "Burnsius oileus" OR "Tropical Checkered-Skipper" OR "Colletes hederae" OR "Ivy Mining Bee" OR "Andrena flavipes" OR "Yellow-Legged Mining Bee" OR "Dascyllus melanurus" OR "Blacktail Humbug" OR "Amphiprion frenatus" OR "Blackback Anemonefish" OR "Dione vanillae" OR "Gulf Fritillary" OR "Dascyllus trimaculatus" OR "Threespot Damselfish" OR "Amegilla sp." OR "Digger Bees" OR "Chromis margaritifer" OR "Bicolor Chromis" OR "Trichodes ornatus" OR "Ornate Checkered Beetle")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Bidens beckii" OR "Beck's Water-Marigold" OR "Fontinalis neomexicana" OR "New Mexican Fontinalis Moss" OR "Amphipholis kochii" OR "Brittle Star" OR "Trematomus newnesi" OR "Dusky Rockcod" OR "Centrostephanus rodgersii" OR "Sea Urchin" OR "Burnsius oileus" OR "Tropical Checkered-Skipper" OR "Colletes hederae" OR "Ivy Mining Bee" OR "Andrena flavipes" OR "Yellow-Legged Mining Bee" OR "Dascyllus melanurus" OR "Blacktail Humbug" OR "Amphiprion frenatus" OR "Blackback Anemonefish" OR "Dione vanillae" OR "Gulf Fritillary" OR "Dascyllus trimaculatus" OR "Threespot Damselfish" OR "Amegilla sp." OR "Digger Bees" OR "Chromis margaritifer" OR "Bicolor Chromis" OR "Trichodes ornatus" OR "Ornate Checkered Beetle")

# Version 1.43, Commit 362b53bcce8: 03.17.2023

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Pontastacus leptodactylus" OR "Narrow-clawed Crayfish" OR "Sclerophrys maculata" OR "Flat-backed Toad" OR "Taenia saginata" OR "Beef Tapeworm" OR "Oncorhynchus masou ssp. masou" OR "Cherry Salmon" OR "Salvelinus curilus" OR "Southern Dolly Varden" OR "Gyrodactylus kobayashii" OR "Flatworm" OR "Gyrodactylus derjavini" OR "Flatworm" OR "Filenchus filiformis" OR "Nematode" OR "Saurida undosquamis" OR "Brushtooth Lizardfish" OR "Pseudorhabdosynochus lantauensis" OR "Monogenean" OR "Hamiota subangulata" OR "Shiny-Rayed Pocketbook" OR "Wlassicsia pannonica" OR "Cladoceran" OR "Athene brama" OR "Spotted Owlet" OR "Epioblasma rangiana" OR "Northern Riffleshell" OR "Chelonus bifoveolatus" OR "Braconid Wasp" OR "Lamellodiscus sp." OR "Monogenean Flatworms")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Atkinsiella sp." OR "Oomycetes" OR "Tilletia laevis" OR "Bunt Of Wheat" OR "Polyscytalum pustulans" OR "Skin Spot of Potatoes" OR "Fusarium redolens" OR "Fungus" OR "Penicillium echinulatum" OR "Mold" OR "Lysiloma latisiliquum" OR "False Tamarind" OR "Prosopis cineraria" OR "Jand" OR "Senegalia caesia" OR "Soap Bark" OR "Vachellia nilotica ssp. indica" OR "Prickly Acacia" OR "Pterocarpus marsupium" OR "Malabar Kino" OR "Acacia holosericea" OR "Candelabra Wattle" OR "Dalbergia latifolia" OR "Indian Rosewood" OR "Pinus gerardiana" OR "Chilghoza Pine" OR "Vachellia nilotica" OR "Gum Arabic Tree" OR "Vachellia nilotica ssp. adstringens" OR "Cassie" OR "Xerochrysum bracteatum" OR "Bracted Strawflower" OR "Pontastacus leptodactylus" OR "Narrow-clawed Crayfish" OR "Sclerophrys maculata" OR "Flat-backed Toad" OR "Taenia saginata" OR "Beef Tapeworm" OR "Oncorhynchus masou ssp. masou" OR "Cherry Salmon" OR "Salvelinus curilus" OR "Southern Dolly Varden" OR "Gyrodactylus kobayashii" OR "Flatworm" OR "Gyrodactylus derjavini" OR "Flatworm" OR "Filenchus filiformis" OR "Nematode" OR "Saurida undosquamis" OR "Brushtooth Lizardfish" OR "Pseudorhabdosynochus lantauensis" OR "Monogenean" OR "Hamiota subangulata" OR "Shiny-Rayed Pocketbook" OR "Wlassicsia pannonica" OR "Cladoceran" OR "Athene brama" OR "Spotted Owlet" OR "Epioblasma rangiana" OR "Northern Riffleshell" OR "Chelonus bifoveolatus" OR "Braconid Wasp" OR "Lamellodiscus sp." OR "Monogenean Flatworms")

# Version 1.43, Commit e2ea990603f: 12.16.2022

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Hexarthra fennica" OR "Rotifer" OR "Anser anser ssp. domesticus" OR "Domestic Goose" OR "Siganus canaliculatus" OR "Pearly Spinefoot" OR "Cottus confusus" OR "Shorthead Sculpin" OR "Taricha rivularis" OR "Red-bellied Newt" OR "Anophryoides haemophila" OR "Ciliate")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Hexarthra fennica" OR "Rotifer" OR "Anser anser ssp. domesticus" OR "Domestic Goose" OR "Siganus canaliculatus" OR "Pearly Spinefoot" OR "Cottus confusus" OR "Shorthead Sculpin" OR "Taricha rivularis" OR "Red-bellied Newt" OR "Anophryoides haemophila" OR "Ciliate" OR "Diaporthe sclerotioides" OR "Penicillium roqueforti" OR "Penicillium commune" OR "Aspergillus fischeri" OR "Monascus ruber" OR "Penicillium carneum" OR "Penicillium discolor" OR "Penicillium caseifulvum" OR "Penicillium nalgiovense" OR "Linnemannia hyalina")

# Version 1.43, Commit e4ec580f5ac: 09.18.2022

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Corbicula fluminea" OR "Asian Clam" OR "Heminothrus peltifer" OR "Mite" OR "Snellenius maculipennis" OR "Braconid Wasp" OR "Fusconaia flava" OR "Wabash Pigtoe" OR "Neobenedenia girellae" OR "Flatworm" OR "Chelon saliens" OR "Leaping Gray Mullet" OR "Nosema cuniculi" OR "Microsporidian" OR "Arianta arbustorum" OR "Copse Snail" OR "Rhinogobius giurinus" OR "Barcheek Goby" OR "Lasmigona complanata" OR "White Heelsplitter")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Poterioochromonas malhamensis" OR "Chrysophyte" OR "Knufia perforans" OR "Fungus" OR "Coniosporium uncinatum" OR "Fungus" OR "Phaeococcomyces" OR "Fungi" OR "Coniosporium apollinis" OR "Fungus" OR "Mariannaea sp." OR "Fungi" OR "Penicillium ochrochloron" OR "Fungus" OR "Pseudanabaena foetida" OR "Cyanobacteria" OR "Chroococcus minutus" OR "Cyanobacteria" OR "Persicaria hydropiperoides" OR "Swamp Smartweed" OR "Mentha pulegium" OR "Pennyroyal" OR "Corbicula fluminea" OR "Asian Clam" OR "Heminothrus peltifer" OR "Mite" OR "Snellenius maculipennis" OR "Braconid Wasp" OR "Fusconaia flava" OR "Wabash Pigtoe" OR "Neobenedenia girellae" OR "Flatworm" OR "Chelon saliens" OR "Leaping Gray Mullet" OR "Nosema cuniculi" OR "Microsporidian" OR "Arianta arbustorum" OR "Copse Snail" OR "Rhinogobius giurinus" OR "Barcheek Goby" OR "Lasmigona complanata" OR "White Heelsplitter")

# Version 1.43, Commit 6a3f964cd1d: 06.17.2022

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

Tiab: ("Hyalella meinerti" OR "Amphipod" OR "Chrysoperla johnsoni" OR "Green Lacewing" OR "Incisitermes minor" OR "Termite" OR "Haplothrips tritici" OR "Wheat Thrip" OR "Buteo rufinus" OR "Long-legged Buzzard" OR "Physalaemus nattereri" OR "Cuyaba Dwarf Frog" OR "Leptodactylus fuscus" OR "Rufous Frog")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

Tiab: ("Hyalella meinerti" OR "Amphipod" OR "Chrysoperla johnsoni" OR "Green Lacewing" OR "Incisitermes minor" OR "Termite" OR "Haplothrips tritici" OR "Wheat Thrip" OR "Buteo rufinus" OR "Long-legged Buzzard" OR "Physalaemus nattereri" OR "Cuyaba Dwarf Frog" OR "Leptodactylus fuscus" OR "Rufous Frog" OR "Ranunculus aquatilis var. diffusus" OR "Whitewater Crowfoot" OR "Plectranthus neochilus" OR "Spur Flower" OR "Garcinia kola" OR "Garcinia" OR "Austroderia fulvida" OR "Grasses" OR "Tilia amurensis" OR "Amur Lime" OR "Vachellia caven" OR "Roman-cassie" OR "Ophiorrhiza rugosa var. prostrata" OR "Wrinkled-Leaf Snake Root")

# Version 1.43, Commit 082e68a8ef4: 03.14.2022

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

tiab: ("Leptocybe invasa" OR "Blue Gum Chalcid Wasp" OR "Sillago ciliata" OR "Sand Whiting" OR "Helicella sp." OR "Land Snails" OR "Empoasca onukii" OR "Tea Green Leafhopper" OR "Steinernema thermophilum" OR "Nematode" OR "Acerophagus flavidulus" OR "Parasitoid Wasp" OR "Dugong dugon" OR "Dugong" OR "Tursiops australis" OR "Burrunan Dolphin" OR "Azya sp." OR "Ladybird Beetles")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

tiab: ("Lentinula edodes" OR "Shiitake Mushroom" OR "Metarhizium globosum" OR "Fungus" OR "Cedrus atlantica" OR "Atlantic Cedar" OR "Salvia rosmarinus" OR "Rosemary" OR "Pinus peuce" OR "Balkan Pine" OR "Vaccinium arctostaphylos" OR "Caucasian Whortleberry" OR "Leptocybe invasa" OR "Blue Gum Chalcid Wasp" OR "Sillago ciliata" OR "Sand Whiting" OR "Helicella sp." OR "Land Snails" OR "Empoasca onukii" OR "Tea Green Leafhopper" OR "Steinernema thermophilum" OR "Nematode" OR "Acerophagus flavidulus" OR "Parasitoid Wasp" OR "Dugong dugon" OR "Dugong" OR "Tursiops australis" OR "Burrunan Dolphin" OR "Azya sp." OR "Ladybird Beetles")

# Version 1.43, Commit e831ee5d1ee: 09.03.2021

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

tiab: ("Farfantepenaeus duorarum" OR "Northern Pink Shrimp" OR "Holmesimysis costata" OR "Mysid" OR "Poecilus cupreus" OR "Ground Beetle" OR "Setophaga coronata" OR "Yellow-rumped Warbler" OR "Aporrectodea caliginosa ssp. trapezoides" OR "Earthworm" OR "Oreochromis aureus x niloticus" OR "Hybrid Tilapia" OR "Nassula variabilis" OR "Ciliate" OR "Sinotaia quadrata histrica" OR "Snail" OR "Naegleria lovaniensis" OR "Amoeba")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following terms:

tiab: ("Farfantepenaeus duorarum" OR "Northern Pink Shrimp" OR "Holmesimysis costata" OR "Mysid" OR "Poecilus cupreus" OR "Ground Beetle" OR "Setophaga coronata" OR "Yellow-rumped Warbler" OR "Aporrectodea caliginosa ssp. trapezoides" OR "Earthworm" OR "Oreochromis aureus x niloticus" OR "Hybrid Tilapia" OR "Nassula variabilis" OR "Ciliate" OR "Sinotaia quadrata histrica" OR "Snail" OR "Naegleria lovaniensis" OR "Amoeba" OR "Cladophora fracta" OR "Green Algae" OR "Spumella sp." OR "Golden Algae")

# Version 1.43, Commit a659be24de5: 07.13.2021

## Updated EPA Exposure and Fate Introductory Text

1. The EPA Exposure and Fate category introductory text was updated to include additional detail about how the search strategies were developed, and EPA contact information as follows:

EPA’s National Center for Environmental Assessment (NCEA) regularly creates chemical-centric evidence maps as part of its literature assessment process. To achieve this, relevant literature must be identified, evaluated, and binned into appropriate categories. Accordingly, EPA and Sciome have develop optimized search strategies that can be used within the SWIFT-Review software application to streamline this process by efficiently retrieving and categorizing relevant literature into pre-defined categories of interest to EPA. All search strings were first evaluated and optimized with respect to an EPA-provided, human-curated, gold-standard dataset. Optimizations were performed using keyword enrichment tools and quantitative analysis to improve the search strings, placing an emphasis on achieving high recall.

This document lists contains the detailed search strings used in SWIFT-Review to automatically tag documents in various categories of interest to environmental health researchers. **To quickly move to a specific search strategy**, click on the search topic below to move to the relevant section of the document. All search strategies were developed jointly by EPA and Sciome. For more information, please contact Amina Wilkins Wilkins.Amina@epa.gov.

1. Updated software to include web link to search strategy documents versus PDF document showing search strategies.

# Version 1.43, Commit a304cfe8446: 06.07.2021

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

tiab: ("Lithobates catesbeianus" OR "American Bullfrog" OR "Morone saxatilis x chrysops" OR "Sunshine Bass" OR "Stenella attenuata" OR "Pantropical Spotted Dolphin" OR "Ascaridia columbae" OR "Nematode" OR "Ischnura rufostigma" OR "Damselfly" OR "Azumiobodo hoyamushi" OR "Kinetoplastid" OR "Physalaemus gracilis" OR "Leptodactylid Frog" OR "Trachinotus ovatus" OR "Snubnose Dart" OR "Sparidentex hasta" OR "Sobaity Seabream" OR "Cristatella mucedo" OR "Bryozoan" OR "Rhodeus sinensis" OR "Bitterling" OR "Dendropsophus molitor" OR "Hylid Frog" OR "Physella pomilia" OR "Claiborne Physa " OR "Macrobdella decora" OR "North American Leech" OR "Haemopis grandis" OR "Leech" OR "Placobdella ornata" OR "Turtle Leech" OR "Placobdella papillifera" OR "Leech")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following search terms:

tiab: ("Ceratocystiopsis sp." OR "Fungi" OR "Chrysosporum ovalisporum" OR "Cyanobacteria" OR "Echium amoenum" OR "Red Feathers" OR "Pfaffia glomerata" OR "Brazilian Ginseng" OR "Deschampsia cespitosa" OR "Tufted Hairgrass" OR "Shibataea lancifolia" OR "Bamboo" OR "Pleioblastus argenteostriatus" OR "Silverstripe Bamboo" OR "Indocalamus decorus" OR "Flowering Plant" OR "Sasaella masamuneana" OR "Japanese Bamboo" OR "Pleioblastus fortunei" OR "Pleioblastus" OR "Pleioblastus viridistriatus" OR "Pleioblastus" OR "Lithobates catesbeianus" OR "American Bullfrog" OR "Morone saxatilis x chrysops" OR "Sunshine Bass" OR "Stenella attenuata" OR "Pantropical Spotted Dolphin" OR "Ascaridia columbae" OR "Nematode" OR "Ischnura rufostigma" OR "Damselfly" OR "Azumiobodo hoyamushi" OR "Kinetoplastid" OR "Physalaemus gracilis" OR "Leptodactylid Frog" OR "Trachinotus ovatus" OR "Snubnose Dart" OR "Sparidentex hasta" OR "Sobaity Seabream" OR "Cristatella mucedo" OR "Bryozoan" OR "Rhodeus sinensis" OR "Bitterling" OR "Dendropsophus molitor" OR "Hylid Frog" OR "Physella pomilia" OR "Claiborne Physa " OR "Macrobdella decora" OR "North American Leech" OR "Haemopis grandis" OR "Leech" OR "Placobdella ornata" OR "Turtle Leech" OR "Placobdella papillifera" OR "Leech")

# Version 1.43, Commit 5d3c8806d37: 04.26.2021

## Modified Health Outcomes and Characteristics of Carcinogens categories

1. The Health Outcomes and Characteristics of Carcinogens queries were modified by ensuring all hyphenated terms were placed within quotation marks so that individual words would not be queried separately.

# Version 1.43, Commit 06abda34136: 03.09.2021

## Updated Animal (all) and Ecotoxicity (animal and plant) Evidence Stream categories

1. The Evidence Stream category, Animal (all) was updated to include the following search terms:

tiab: ("Tanypodinae" OR "Midge Subfamily" OR "Orthocladiinae" OR "Midge Subfamily" OR "Zonotrichia leucophrys gambelii" OR "Gambel's White-crowned Sparrow" OR "Tanytarsini" OR "Midge Tribe" OR "Grammostola rosea" OR "Chilean Rose Tarantula" OR "Nyctibatrachus major" OR "Malabar Night Frog" OR "Zonotrichia leucophrys leucophrys" OR "White-crowned Sparrow" OR "Amphileptus sp." OR "Ciliates" OR "Ectropis obliqua hypulina" OR "Moth" OR "Tubulinea" OR "Eukaryotes" OR "Amoebozoa" OR "Eukaryotes" OR "Rotaria sp." OR "Rotifers" OR "Cinetochilum sp." OR "Ciliates" OR "Mononychellus tanajoa" OR "Cassava Green Mite" OR "Physalaemus olfersii" OR "Atlantic Forest Dwarf Frog" OR "Trochilia sp." OR "Ciliates" OR "Excirolana latipes" OR "Marine Isopod" OR "Rhinella ornata" OR "Toad" OR "Epistylis sp." OR "Ciliates" OR "Therioaphis trifolii" OR "Yellow Clover Aphid" OR "Saissetia neglecta" OR "Caribbean Black Scale" OR "Pinnaspis strachani" OR "Hibiscus Snow Scale")

1. The Evidence Stream category, Ecotoxicity (animal and plant) was updated to include the following search terms:

tiab: ("Nitzschia ovalis" OR "Diatom" OR "Raphidocelis subcapitata" OR "Green Algae" OR "Selenastrum capricornutum" OR "Green Algae" OR "Hypocalymma angustifolium" OR "Pink-flowered Myrtle" OR "Coccinia grandis" OR "Ivy Gourd" OR "Liatris punctata" OR "Dotted Blazing Star" OR "Banksia attenuata" OR "Candlestick Banksia" OR "Banksia occidentalis" OR "Red Swamp Banksia" OR "Tanypodinae" OR "Midge Subfamily" OR "Orthocladiinae" OR "Midge Subfamily" OR "Zonotrichia leucophrys gambelii" OR "Gambel's White-crowned Sparrow" OR "Tanytarsini" OR "Midge Tribe" OR "Grammostola rosea" OR "Chilean Rose Tarantula" OR "Nyctibatrachus major" OR "Malabar Night Frog" OR "Zonotrichia leucophrys leucophrys" OR "White-crowned Sparrow" OR "Amphileptus sp." OR "Ciliates" OR "Ectropis obliqua hypulina" OR "Moth" OR "Tubulinea" OR "Eukaryotes" OR "Amoebozoa" OR "Eukaryotes" OR "Rotaria sp." OR "Rotifers" OR "Cinetochilum sp." OR "Ciliates" OR "Mononychellus tanajoa" OR "Cassava Green Mite" OR "Physalaemus olfersii" OR "Atlantic Forest Dwarf Frog" OR "Trochilia sp." OR "Ciliates" OR "Excirolana latipes" OR "Marine Isopod" OR "Rhinella ornata" OR "Toad" OR "Epistylis sp." OR "Ciliates" OR "Therioaphis trifolii" OR "Yellow Clover Aphid" OR "Saissetia neglecta" OR "Caribbean Black Scale" OR "Pinnaspis strachani" OR "Hibiscus Snow Scale")

# Version 1.43, Commit 5badaf95501: 03.08.2021

## Updated Physical Chemistry (beta) Evidence Stream category

1. The Evidence Stream category, Physical Chemistry (beta) was updated to include “Kaw” and “air water partition” as follows:

## Physical Chemistry (beta)

tiab: ( ("physical form" OR "physical state" OR "physical chemistry" OR "physical properties" AND ("solid" OR "liquid" OR "gaseous state" OR "color" OR "scent" OR "odor" OR "odour" OR "smell") ) OR "melting point" OR "boiling point" OR "density" OR "vapor pressure" OR "vapor density" OR "water solubility" OR "aqueous solubility" OR "aqueous saturation point" OR "water saturation point" OR "octanol:water partition coefficient" OR "octanol-water partition coefficient" OR "octanol/water partition coefficient" OR "octanol water partition coefficient" OR "Kow" OR "Henry's Law constant" OR "Kaw" OR "air water partition" OR "flash point" OR "autoflammability" OR "viscosity" OR "refractive index" OR "dielectric constant")

# Version 1.43, Commit 4e2fb034c24: 02.23.2021

## Added new EPA Exposure and Fate category

1. The following **EPA Exposure and Fate** category was added. It includes the following 10 subcategories:
	1. Sources Production and Uses
	2. Environmental Media
	3. Environmental Concentrations
	4. Human Exposure Measures
	5. Environmental Fate and Transport
	6. Physical Chemical Properties
	7. Populations
	8. Engineering
	9. Consumer
	10. Consumer (TSCA)

# Version 1.43, Commit 335f2ad76fa: 12.05.2020

## Added new Epidemiologic Quantitative Analyses search strategy to the Evidence Stream category

1. The following **Epidemiologic Quantitative Analyses** search strategy was added to the Evidence Stream category. It combines the Human Evidence Stream and specific dose-response terms:

mesh\_mh:( humans OR "human development" ) OR tiab: (human\* OR person\* OR people) OR

mesh\_mh:( age groups) OR tiab: (pediatric\* OR paediatric\* OR baby OR babies OR toddler\* OR child\* OR youth\* OR youngster\* OR tween\* OR teen OR teens OR teenager\*) OR (tiab:("in utero" OR prenat\* OR perinat\* OR neonat\* OR postnat\*) AND NOT tiab: (mice OR mouse OR rat OR rats)) OR tiab:(preschool\* OR "pre-school\*" OR kindergarten\* OR schoolchild\* OR student\*) OR tiab:("middle age\*" OR aged OR elder\* OR "senior citizen\*" OR seniors OR retiree\* OR septuagenarian\* OR octagenarian\* OR sexagenarian\* OR nonagenarian\* OR centenarian\*) OR mesh\_mh:("nuclear family") OR tiab:(famil\* OR parent\* OR father\* OR mother\* OR sibling\* OR brother\* OR sister\* OR twin OR twins OR "stepfather\*" OR "step father\*" OR "stepmother\*" OR "step mother\*" OR "stepdaughter\*" OR "step daughter\*" OR "stepson\*" OR "step son\*" OR aunt\* OR uncle\* OR niece\* OR nephew\* OR grandparent\* OR grandfather\* OR "grand father\*" OR grandmother\* OR "grand mother\*" OR grandchild\* OR granddaughter\* OR grandson\* OR spouse\* OR partner\* OR husband\* OR wife OR wives OR guardian\* OR caregiver\* OR "care giver\*") OR mesh\_mh:(men OR women) OR tiab:(men OR man OR boy OR boys OR boyhood OR women OR woman OR girl OR girls OR girlhood) OR mesh\_mh:("population groups" OR "vulnerable populations") OR tiab:("african american\*" OR "asian american\*" OR hispanic\* OR latina\* OR latino\* OR "mexican american\*" OR underserved OR disadvantaged) OR mesh\_mh:("epidemiologic studies" OR "double-blind method" OR "single-blind method") OR mesh\_sh:(epidemiology) OR tiab:("case control\*" OR cohort OR "cross sectional" OR "follow-up study" OR longitudinal OR prospective OR retrospective) OR mesh\_pubtype:("case reports" OR "clinical trial" OR "observational study" OR "randomized control trial" OR "twin study") OR tiab:("clinical trial\*" OR observational OR "randomized control trial\*") OR mesh\_mh:("research subjects" OR "human experimentation" OR patients OR "Patient Participation") OR tiab:("human subject\*" OR "research subject\*" OR client\* OR patient\* OR inpatient\* OR outpatient\* OR participant\* OR volunteer\*) OR mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*) OR tiab\_stemmed:(epidemiologic) OR mesh\_mh:("research subjects" OR "human experimentation" OR patients OR "Patient Participation") OR tiab:("human subject\*" OR "research subject\*" OR client\* OR patient\* OR inpatient\* OR outpatient\* OR participant\* OR volunteer\*) OR mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*) AND ("meta-analysis" OR "Systematic review" OR tiab\_punct:"P <"  OR tiab\_punct:"p <" OR tiab\_punct:"P <="  OR tiab\_punct:"p <=" OR tiab\_punct:"P >\*"  OR tiab\_punct:"p  >\*" OR tiab\_punct:"p=\*" OR tiab\_punct:"P =" OR tiab\_punct:"p =" OR tiab\_punct:"p>\*" OR tiab\_punct:"p<\*" OR tiab:"significan\*" OR  tiab:"nonsignificant" OR RR OR RRs OR SMR OR SMRs  OR "rate ratio\*" OR "prevalence ratio\*" OR "hazard ratio\*"   OR "odds ratio\*" OR "risk ratio\*" OR "relative risk\*" OR "prevalence ratio\*" OR tiab:"covariate\*" OR tiab:"adjust\*" OR tiab:"control\* for" OR tiab:"associat\*" OR tiab:"confound\*" OR CI OR "confidence interval\*" OR "credible interval" OR regression\* OR "explanatory variable\*" OR tiab:"dose-response")

# Version 1.43, Commit 335f2ad76fa: 12.05.2020

## Updated the Animal (all), Ecotoxicity (animal and plant) and Human search strategies in the Evidence Stream category

1. The **Animal (all)** search strategy was revised to include the following terms:

tiab: ("Trichopria sp." OR "Wasp" OR "Encarsia hispida" OR "Parasitic Wasp" OR "Pemphredon fabricii" OR "Sand Wasp" OR "Andricus sp." OR "Gall Wasps" OR "Puntius stigma" OR "Pool Barb" OR "Sparganothis sulfureana" OR "Moth" OR "Musculium lacustre" OR "Lake Fingernailclam" OR "Choristoneura parallela" OR "Budworm" OR "Meromyza americana" OR "Wheat Stem Maggot" OR "Plebeia lucii" OR "Stingless Bees" OR "Bracon vulgaris" OR "Cotton Boil Weevil Ectoparasitoid" OR "Scaptotrigona xanthotricha" OR "Stingless Bee" OR "Noterus sp." OR "Beetles" OR "Cataclysta lemnata" OR "Moth" OR "Hydrometra sp." OR "Water Measurers" OR "Elophila nymphaeata" OR "Brown China Mark Moth" OR "Bathyomphalus contortus" OR "Orb Snail" OR "Pardosa lugubris" OR "Wolf Spider" OR "Creontiades signatus" OR "Plant Bug" OR "Pyrrhosoma nymphula" OR "Large Red Dragonfly" OR "Eretmocerus hayati" OR "Parasitoid" OR "Scaptotrigona bipunctata" OR "Stingless Bee" OR "Chrysopa phyllochroma" OR "Lacewing" OR "Ectyphinae" OR "Opomyzid Flies" OR "Trichotria pocillum" OR "Rotifer" OR "Lyriothemis pachygastra" OR "Damselfly" OR "Regimbartia attenuata" OR "Beetle" OR "Gammarus insensibilis" OR "Scud" OR "Rhinophoridae" OR "Woodlouse Flies" OR "Tipula aino" OR "Large Crane Fly" OR "Chironominae" OR "Chironomidae Subfamily" OR "Lauxaniidae" OR "Beach Flies" OR "Lepadella ovalis" OR "Rotifer" OR "Lecane monostyla" OR "Rotifer" OR "Cyzicus gifuensis" OR "Clam Shrimp" OR "Melanotus cribulosus" OR "Click Beetle" OR "Cyrtogramme turbata" OR "Moth" OR "Enochrus simulans" OR "Beetle" OR "Euglenaria clavata" OR "Euglenoid" OR "Sternolophus rufipes" OR "Water Beetle" OR "Eretes griseus" OR "Diving Beetle" OR "Toxoneuron nigriceps" OR "Tobacco Budworm Parasitoid Wasp" OR "Pipunculidae" OR "Big-headed Flies" OR "Acrolepia sapporensis" OR "Sedge Moth" OR "Heleomyzidae" OR "Heleomyzid Flies" OR "Gyraulus laevis" OR "Smooth Ram’s Horn Snail" OR "Dolichoderinae" OR "Subfamily of Ants" OR "Squatinella sp." OR "Rotifers" OR "Acroneuria carolinensis" OR "Stonefly" OR "Hesperocorixa atopodonta" OR "Water Boatman" OR "Salpingoeca sp." OR "Protozoans" OR "Auchenorrhyncha" OR "Suborder of Hoppers" OR "Thrips alliorum" OR "Thrip" OR "Graphoderus fascicollis" OR "Predaceous Diving Beetle" OR "Cratacanthus dubius" OR "Beetle")

1. The **Ecotoxicity (animal and plant)** search strategy was revised to include the following terms:

tiab: ("Chromulina minima" OR "Golden Algae" OR "Gomphonema angustatum" OR "Diatom" OR "Chromulina sphaeridia" OR "Golden-Brown Algae" OR "Chromulina sphaerica" OR "Golden Algae" OR "Stauroneis phoenicenteron" OR "Diatom" OR "Chromulina nebulosa" OR "Golden Algae" OR "Gyrosigma acuminatum" OR "Diatom" OR "Nitzschia vermicularis" OR "Diatom" OR "Diploneis oblongella" OR "Algae" OR "Chromulina vestita" OR "Algae" OR "Chromulina parvula" OR "Algae" OR "Stokesiella epipyxis" OR "Algae" OR "Cymatopleura solea" OR "Diatom" OR "Navicula veneta" OR "Diatom" OR "Neurospora sp." OR "Fungi" OR "Metarhizium majus" OR "Fungus" OR "Snowella sp." OR "Blue-Green Algae" OR "Oscillatoria limosa" OR "Blue-green Algae" OR "Merismopedia punctata" OR "Algae" OR "Limnothrix rosea" OR "Algae" OR "Merismopedia glauca" OR "Blue-green Algae" OR "Cosmarium meneghinii" OR "Green Algae" OR "Cosmarium praemorsum" OR "Algae" OR "Scenedesmus ecornis" OR "Green Algae" OR "Ankyra judayi" OR "Algae" OR "Characium ensiforme" OR "Algae" OR "Phacus acuminatus" OR "Euglenoid" OR "Katablepharis ovalis" OR "Algae" OR "Tetrachlorella ornata" OR "Algae" OR "Euglena geniculata" OR "Euglenoid" OR "Scenedesmus aculeolatus" OR "Green Algae" OR "Characium sp." OR "Green Algae" OR "Phacotus lendneri" OR "Algae" OR "Chloromonas grovei" OR "Algae" OR "Trachelomonas hispida" OR "Euglenoid" OR "Scenedesmus flavescens" OR "Algae" OR "Closterium leibleinii" OR "Algae" OR "Codosiga sp." OR "Choanoflagellates" OR "Phacus mirabilis" OR "Protozoa" OR "Willea rectangularis" OR "Green Algae" OR "Planktosphaeria gelatinosa" OR "Green Algae" OR "Characium ornithocephalum var. harpochytriiforme" OR "Algae" OR "Sphaerellopsis sp." OR "Algae" OR "Nephroselmis olivacea" OR "Green Algae" OR "Paulschulzia pseudovolvox" OR "Algae" OR "Chlamydomonas gloeophila" OR "Green Algae" OR "Phacus longicauda" OR "Euglenoid" OR "Coleochaete scutata" OR "Green Algae" OR "Apiocystis brauniana" OR "Green Algae" OR "Hydrianum coronatum" OR "Algae" OR "Cyathomonas truncata" OR "Algae" OR "Cosmarium bioculatum" OR "Algae" OR "Desmodesmus abundans" OR "Algae" OR "Geminella interrupta" OR "Green Algae" OR "Closterium pronum" OR "Algae" OR "Monosiga sp." OR "Choanoflagellates" OR "Treubaria triappendiculata" OR "Green Algae" OR "Euglena minima" OR "Algae" OR "Vitreochlamys aulata" OR "Green Algae" OR "Trichopria sp." OR "Wasp" OR "Encarsia hispida" OR "Parasitic Wasp" OR "Pemphredon fabricii" OR "Sand Wasp" OR "Andricus sp." OR "Gall Wasps" OR "Puntius stigma" OR "Pool Barb" OR "Sparganothis sulfureana" OR "Moth" OR "Musculium lacustre" OR "Lake Fingernailclam" OR "Choristoneura parallela" OR "Budworm" OR "Meromyza americana" OR "Wheat Stem Maggot" OR "Plebeia lucii" OR "Stingless Bees" OR "Bracon vulgaris" OR "Cotton Boil Weevil Ectoparasitoid" OR "Scaptotrigona xanthotricha" OR "Stingless Bee" OR "Noterus sp." OR "Beetles" OR "Cataclysta lemnata" OR "Moth" OR "Hydrometra sp." OR "Water Measurers" OR "Elophila nymphaeata" OR "Brown China Mark Moth" OR "Bathyomphalus contortus" OR "Orb Snail" OR "Pardosa lugubris" OR "Wolf Spider" OR "Creontiades signatus" OR "Plant Bug" OR "Pyrrhosoma nymphula" OR "Large Red Dragonfly" OR "Eretmocerus hayati" OR "Parasitoid" OR "Scaptotrigona bipunctata" OR "Stingless Bee" OR "Chrysopa phyllochroma" OR "Lacewing" OR "Ectyphinae" OR "Opomyzid Flies" OR "Trichotria pocillum" OR "Rotifer" OR "Lyriothemis pachygastra" OR "Damselfly" OR "Regimbartia attenuata" OR "Beetle" OR "Gammarus insensibilis" OR "Scud" OR "Rhinophoridae" OR "Woodlouse Flies" OR "Tipula aino" OR "Large Crane Fly" OR "Chironominae" OR "Chironomidae Subfamily" OR "Lauxaniidae" OR "Beach Flies" OR "Lepadella ovalis" OR "Rotifer" OR "Lecane monostyla" OR "Rotifer" OR "Cyzicus gifuensis" OR "Clam Shrimp" OR "Melanotus cribulosus" OR "Click Beetle" OR "Cyrtogramme turbata" OR "Moth" OR "Enochrus simulans" OR "Beetle" OR "Euglenaria clavata" OR "Euglenoid" OR "Sternolophus rufipes" OR "Water Beetle" OR "Eretes griseus" OR "Diving Beetle" OR "Toxoneuron nigriceps" OR "Tobacco Budworm Parasitoid Wasp" OR "Pipunculidae" OR "Big-headed Flies" OR "Acrolepia sapporensis" OR "Sedge Moth" OR "Heleomyzidae" OR "Heleomyzid Flies" OR "Gyraulus laevis" OR "Smooth Ram’s Horn Snail" OR "Dolichoderinae" OR "Subfamily of Ants" OR "Squatinella sp." OR "Rotifers" OR "Acroneuria carolinensis" OR "Stonefly" OR "Hesperocorixa atopodonta" OR "Water Boatman" OR "Salpingoeca sp." OR "Protozoans" OR "Auchenorrhyncha" OR "Suborder of Hoppers" OR "Thrips alliorum" OR "Thrip" OR "Graphoderus fascicollis" OR "Predaceous Diving Beetle" OR "Cratacanthus dubius" OR "Beetle")

1. The **Human** search strategy was revised to include the following terms:

mesh\_mh:("research subjects" OR "human experimentation" OR patients OR "Patient Participation") OR tiab:("human subject\*" OR "research subject\*" OR client\* OR patient\* OR inpatient\* OR outpatient\* OR participant\* OR volunteer\*) OR mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*)

# Version 1.43, Commit 4260356e643: 08.28.2020

## Updated the Animal (all) and Ecotoxicity (animal and plant) search strategies in the Evidence Stream category

1. The **Animal (all)** search strategy was revised to include the following terms:

tiab: ("Aphyocypris chinensis" OR "Chinese Bleak" OR "Parachromis managuensis" OR "Guapote Tigre" OR "Aenasius arizonensis" OR "Endoparasitoid" OR "Tor tambroides" OR "Malaysian Mahseer" OR "Ciconia ciconia" OR "White Stork" OR "Bombus agrorum" OR "Agrilus coxalis auroguttatus" OR "Goldspotted Oak Borer" OR "Strymon megarus" OR "Butterfly" OR "Aphidius smithi" OR "Pea Aphid" OR "Blosyrus asellus" OR "Rough Sweetpotato Weevil" OR "Dyscinetus morator" OR "Beetle" OR "Scatopsidae" OR "Minute Black Scavenger Flies" OR "Neosorius brevipennis" OR "Rove Beetle" OR "Encarsia aleurochitonis" OR "Stingless Wasp" OR "Onychomys torridus" OR "Southern Grasshopper Mouse" OR "Neotoma albigula" OR "White-throated Woodrat" OR "Dipodomys spectabilis" OR "Banner-tailed Kangaroo Rat " OR "Neotoma micropus" OR "Southern Plains Woodrat" OR "Xeropicta derbentina" OR "Air-breathing Land Snail" OR "Perognathus flavus" OR "Silky Pocket Mouse" OR "Chaetodipus penicillatus" OR "Desert Pocket Mouse" OR "Menacanthus sp." OR "Feather Lice" OR "D ipodomys ordii" OR "Ord's Kangaroo Rat")

1. The **Ecotoxicity (animal and plant)** search strategy was revised to include the following terms:

tiab: ("Histomonas meleagridis" OR Protist OR "Munroa pulchella" OR "Low Woollygrass" OR "Xanthocephalum sp." OR "Xanthocephalum" OR "Ziziphus obtusifolia var. obtusifolia" OR Lotebush OR "Scleropogon brevifolius" OR Burrograss OR "Sporobolus flexuosus" OR "Mesa Dropseed" OR "Hilaria mutica" OR "Tobosa Grass" OR "Muhlenbergia porteri" OR "Bush Muhly" OR "Ailanthus excelsa" OR "Tree of Heaven” OR "Aphyocypris chinensis" OR "Chinese Bleak" OR "Parachromis managuensis" OR "Guapote Tigre" OR "Aenasius arizonensis" OR "Endoparasitoid" OR "Tor tambroides" OR "Malaysian Mahseer" OR "Ciconia ciconia" OR "White Stork" OR "Bombus agrorum" OR "Agrilus coxalis auroguttatus" OR "Goldspotted Oak Borer" OR "Strymon megarus" OR "Butterfly" OR "Aphidius smithi" OR "Pea Aphid" OR "Blosyrus asellus" OR "Rough Sweetpotato Weevil" OR "Dyscinetus morator" OR "Beetle" OR "Scatopsidae" OR "Minute Black Scavenger Flies" OR "Neosorius brevipennis" OR "Rove Beetle" OR "Encarsia aleurochitonis" OR "Stingless Wasp" OR "Onychomys torridus" OR "Southern Grasshopper Mouse" OR "Neotoma albigula" OR "White-throated Woodrat" OR "Dipodomys spectabilis" OR "Banner-tailed Kangaroo Rat " OR "Neotoma micropus" OR "Southern Plains Woodrat" OR "Xeropicta derbentina" OR "Air-breathing Land Snail" OR "Perognathus flavus" OR "Silky Pocket Mouse" OR "Chaetodipus penicillatus" OR "Desert Pocket Mouse" OR "Menacanthus sp." OR "Feather Lice" OR "D ipodomys ordii" OR "Ord's Kangaroo Rat")

# Version 1.43, Commit 21d467a5fb6: 06.04.2020

## Updated the Ecotoxicity (animal and plant) and Animal (all) search strategies in the Evidence Stream category

1. The **Ecotoxicity (animal and plant)** search strategy was revised to include the following terms:

tiab: ("Sargassum hornschuchii" OR "Algae" OR "Alexandrium pacificum" OR "Dinoflagellate" OR "Bipolaris iridis" OR "Aspergillus chevalieri" OR "Penicillium solitum" OR "Plectranthus verticillatus" OR "Swedish Ivy" OR "Selaginella moellendorffii" OR "Fern" OR "Begonia x hiemalis" OR "Winter-flowering Begonia" OR "Ocimum tenuiflorum" OR "Holy Basil" OR "Oryzias dancena" OR "Mundakanni" OR "Sparicotyle chrysophrii" OR "Flatworm" OR "Zeuxapta seriolae" OR "Flatworm" OR "Euwallacea sp." OR "Ambrosia Beetles" OR "Entobdella hippoglossi" OR "Monogenean Parasite" OR "Glaucosoma hebraicum" OR "Westralian Jewfish" OR "Enterocytozoon hepatopenaei" OR "Microsporidian" OR "Dactylogyrus minutus" OR "Monogenean Fluke" OR "Typhlodromus rhenanus" OR "Mite" OR "Nanophyetus salmincola" OR "Trematode Parasite" OR "Haliotrema sp." OR "Flatworms" OR "Haliotrema abaddon" OR "Monogenean Parasite" OR "Typhlodromus athiasae" OR "Mite" OR "Dawestrema cycloancistrium" OR "Flatworm" OR "Corydoras melanistius" OR "Black-spotted Corydoras" OR "Neobenedenia melleni" OR "Flatworm Parasite" OR "Elassoma gilberti" OR "Pygmy Sunfish" OR "Chaetogaster diastrophus" OR "Aquatic Oligochaete Worm" OR "Anastrepha obliqua" OR "West Indian Fruit Fly " OR "Trichophyra piscium" OR "Ciliate" OR "Opisthorchis felineus" OR "Cat Liver Fluke" OR "Lutjanus johnii" OR "Spotted-scaled Sea Perch" OR "Branchiobdella parasita" OR "Worm" OR "Cichlidogyrus sp." OR "Monogenean Flatworms" OR "Anastrepha fraterculus" OR "South American Fruit Fly")

1. The **Animal (all)** search strategy was revised to include the following terms:

tiab: ("Oryzias dancena" OR "Mundakanni" OR "Sparicotyle chrysophrii" OR "Flatworm" OR "Zeuxapta seriolae" OR "Flatworm" OR "Euwallacea sp." OR "Ambrosia Beetles" OR "Entobdella hippoglossi" OR "Monogenean Parasite" OR "Glaucosoma hebraicum" OR "Westralian Jewfish" OR "Enterocytozoon hepatopenaei" OR "Microsporidian" OR "Dactylogyrus minutus" OR "Monogenean Fluke" OR "Typhlodromus rhenanus" OR "Mite" OR "Nanophyetus salmincola" OR "Trematode Parasite" OR "Haliotrema sp." OR "Flatworms" OR "Haliotrema abaddon" OR "Monogenean Parasite" OR "Typhlodromus athiasae" OR "Mite" OR "Dawestrema cycloancistrium" OR "Flatworm" OR "Corydoras melanistius" OR "Black-spotted Corydoras" OR "Neobenedenia melleni" OR "Flatworm Parasite" OR "Elassoma gilberti" OR "Pygmy Sunfish" OR "Chaetogaster diastrophus" OR "Aquatic Oligochaete Worm" OR "Anastrepha obliqua" OR "West Indian Fruit Fly " OR "Trichophyra piscium" OR "Ciliate" OR "Opisthorchis felineus" OR "Cat Liver Fluke" OR "Lutjanus johnii" OR "Spotted-scaled Sea Perch" OR "Branchiobdella parasita" OR "Worm" OR "Cichlidogyrus sp." OR "Monogenean Flatworms" OR "Anastrepha fraterculus" OR "South American Fruit Fly")

# Version 1.43, Commit e07d0999658: 03.16.2020

## Updated the Ecotoxicity (animal and plant) and Animal (all) search strategies in the Evidence Stream category

1. The **Ecotoxicity (animal and plant)** search strategy was revised to include the following terms:

tiab: ("Sargassum polycystum" OR "Brown Algae" OR "Nitzschia obtusa var. nana" OR "Diatom" OR "Chromista" OR "Eukaryote Kingdom" OR "Diatomaceae" OR "Diatom Family" OR "Amyloodinium ocellatum" OR "Marine Velvet" OR "Berkleasmium sp." OR "Fungi" OR "Ceriporiopsis hypolateritia" OR "Red Root Fungus" OR "Fusarium fujikuroi" OR "Fungus" OR "Rosellinia arcuata" OR "Leaf Blotch of Barley" OR "Kretzschmaria deusta" OR "Cyanobacteria" OR "Rigidoporus microporus" OR "Blue-Green Algae Phylum" OR "Phellinus noxius" OR "Pseudopithomyces chartarum" OR "Septoria sp." OR "Ustilago striiformis" OR "Rhizophydium megarrhizum" OR "Exserohilum turcicum" OR "Fusarium oxysporum f. sp. melonis" OR "Gibberella sp." OR "Neurospora sitophila" OR "Lemonniera terrestris" OR "Lemonniera" OR "Gloeotinia granigena" OR "Tumularia aquatica" OR "Rhynchosporium secalis" OR "Austropuccinia psidii" OR "Spilocaea oleaginea" OR "Trichoderma gamsii" OR "Cercospora carotae" OR "Trichoderma asperellum" OR "Pyrenophora avenae" OR "Venturia effusa" OR "Ramularia collo-cygni" OR "Parastagonospora avenae" OR "Funneliformis caledonium" OR "Papulaspora sepedonioides" OR "Funneliformis constrictum" OR "Alternaria triticina" OR "Pezoloma ericae" OR "Claroideoglomus etunicatum" OR "Funneliformis mosseae" OR "Planktothrix rubescens" OR "Cyanophycota" OR "Populus x canadensis" OR "Canadian Poplar" OR "Chrysanthemum x morifolium" OR "Florist's Daisy" OR "Gladiolus x gandavensis" OR "Gladiolus" OR "Citrus x limon" OR "Lemon" OR "Hydrocharis dubia" OR "Frogbit" OR "Digitaria insularis" OR "Sourgrass" OR "Iris x hollandica" OR "White Wedgewood" OR "Taxus x media" OR "Yew" OR "Stictocardia tiliifolia" OR "Spottedheart" OR "Spermacoce alata" OR "Winged False Buttonweed " OR "Sesbania rostrata" OR "Kantsakantsa" OR "Gardenia jasminoides" OR "Cape Jasmine " OR "Miscanthus x giganteus" OR "Giant Miscanthus" OR "Bothriochloa bladhii" OR "Caucasian Bluestem " OR "Ventenata dubia" OR "North Africa grass" OR "Populus x canescens" OR "Gray Poplar" OR "Nymphaea tetragona" OR "Pygmy Waterlily" OR "Nitella microcarpa var. wrightii" OR "Green Algae" OR "Cryptomonas obovata" OR "Cryptomonad" OR "Vitis x labruscana" OR "Grape, Concord" OR "Crambe abyssinica" OR "Colewort" OR "Arabidopsis halleri" OR "Rockcress" OR "Calyptocarpus vialis" OR "Straggler Daisy " OR "Bougainvillea spectabilis" OR "Bougainvillea" OR "Ipomoea indivisa" OR "Morning Glory" OR "Chloris virgata" OR "Feather Fingergrass " OR "Richardia sp." OR "Mexican Clover" OR "Calystegia silvatica ssp. disjuncta" OR "Shortstalk False Bindweed" OR "Chloris x subdolichostachya" OR "Shortspike Windmill Grass " OR "Opuntia engelmannii var. lindheimeri" OR "Texas Pricklypear" OR "Mentha x piperita" OR "Peppermint" OR "Morinda citrifolia" OR "Indian Mulberry" OR "Prunella vulgaris ssp. lanceolata" OR "Lance Selfheal" OR "Setaria longiseta" OR "Bristlegrass" OR "Ilex x attenuata" OR "Topal Holly " OR "Ziziphus lotus" OR "lotus tree" OR "Juglans cinerea" OR "White Walnut " OR "Ipomoea pileata" OR "Miyabe Willow" OR "Salix miyabeana" OR "Spiny Mudgrass " OR "Pseudoraphis spinescens" OR "Chinese Chives" OR "Allium tuberosum" OR "Coca" OR "Erythroxylum coca" OR "Holboell's Rockcress" OR "Boechera holboellii" OR "Two-Horn Bundleflower" OR "Desmanthus bicornutus" OR "Delta Arrowhead" OR "Sagittaria platyphylla" OR "Green Algae Family" OR "Desmidiaceae" OR "Hairyawn Muhly" OR "Muhlenbergia capillaris" OR "Bearss Lime" OR "Citrus latifolia" OR "Large Camas " OR "Camassia leichtlinii" OR "Scaly-leaf Nepal Juniper " OR "Juniperus squamata" OR "Amur Honeysuckle Bush" OR "Lonicera maackii" OR "Euglenoid" OR "Trachelomonas oblonga" OR "Toughleaf Iris" OR "Iris tenax" OR "Ribbonweed" OR "Vallisneria australis" OR "Tall Larkspur" OR "Delphinium x occidentale" OR "Spotted Knapweed" OR "Centaurea stoebe ssp. micranthos" OR "Field Lovegrass " OR "Eragrostis elliottii" OR "Tulip Pricklypear " OR "Opuntia phaeacantha" OR "Glossy Abelia" OR "Abelia x grandiflora" OR "West Indian Marsh Grass " OR "Hymenachne amplexicaulis" OR "Rosebay Rhododendron" OR "Rhododendron maximum" OR "Plains Rough Fescue" OR "Festuca hallii" OR "Pubescent Wheatgrass" OR "Thinopyrum intermedium ssp. barbulatum" OR "Curly Mesquite " OR "Hilaria belangeri" OR "Beefsteak Mint " OR "Perilla frutescens" OR "Purple Bushbean" OR "Macroptilium atropurpureum" OR "Congo grass" OR "Urochloa ruziziensis" OR "Egyptian Broomrape " OR "Phelipanche aegyptiaca" OR "Haemorrhage Plant" OR "Aspilia africana" OR "Coco-Yam" OR "Colocasia esculenta" OR "Deflexed Brachiaria " OR "Brachiaria deflexa" OR "False Rhubarb " OR "Rheum rhaponticum" OR "Preston Lilac" OR "Syringa x prestoniae" OR "Blue Wildrye" OR "Elymus glaucus" OR "Nodding Broomrape" OR "Orobanche cernua" OR "Corduroy Tamarind" OR "Arytera lautereriana" OR "Sweetbay" OR "Magnolia virginiana" OR "Missouri Goldenrod" OR "Solidago missouriensis" OR "Argentine Fingergrass" OR "Eustachys retusa" OR "Tropical Brackenfern" OR "Pteridium arachnoideum" OR "Fringed Windmill Grass" OR "Chloris ciliata" OR "Raspberry" OR "Rubus sachalinensis" OR "Purple Meadow-rue" OR "Thalictrum dasycarpum" OR "Dalmatian Toadflax " OR "Linaria dalmatica" OR "Silver Basswood" OR "Polyscias elegans" OR "Northern Silky Oak" OR "Cardwellia sublimis" OR "Common Water Milfoil" OR "Myriophyllum papillosum" OR "Appalachian Sedge " OR "Carex appalachica" OR "Carpentaria Palm" OR "Carpentaria acuminata" OR "Cutleaf Daisy " OR "Erigeron compositus" OR "Tesajo Cactus (Christmastree Cacti)" OR "Opuntia leptocaulis" OR "Pincushion Beardtongue " OR "Penstemon procerus" OR "Pinkfairies " OR "Clarkia pulchella" OR "Woolly Thyme" OR "Thymus praecox ssp. britannicus" OR "Aspen Fleabane" OR "Rhizoclonium riparium" OR "Pale Swallow-wort" OR "Erigeron speciosus" OR "Purpletop Tridens" OR "Vincetoxicum rossicum" OR "Plume Poppy " OR "Tridens flavus" OR "Letterman Needlegrass" OR "Macleaya cordata" OR "Leadplant " OR "Achnatherum lettermanii" OR "Clustertree" OR "Amorpha canescens" OR "European Hornbeam" OR "Ficus racemosa" OR "Tree Tumbo" OR "Choricystis parasitica" OR "Broom Bush" OR "Carpinus betulus" OR "Blacksamson Echinacea" OR "Welwitschia mirabilis" OR "Regal Pelargonium " OR "Pimelea trichostachya" OR "White Panicle Aster" OR "Echinacea angustifolia" OR "Giant Fir" OR "Pelargonium x domesticum" OR "Wheatgrass " OR "Symphyotrichum lanceolatum" OR "Hen's Eyes" OR "Abies grandis" OR "Pondweed" OR "Agropyron sp." OR "Buckthorn" OR "Ardisia crenata" OR "Pitcherplant " OR "Chromochloris zofingiensis" OR "Red Ash" OR "Potamogeton sulcatus" OR "Fetterbush Lyonia " OR "Rhamnus sp." OR "Prairie Fleabane" OR "Sarracenia purpurea" OR "Barilla" OR "Alphitonia excelsa" OR "Central American Acacia" OR "Lyonia lucida" OR "Boat-Thorned Acacia" OR "Gayralia oxysperma" OR "Large Gray Willow" OR "Edaphochlorella mirabilis" OR "Bushkiller" OR "Erigeron strigosus" OR "Cuban Royal Palm " OR "Halogeton glomeratus" OR "Blue Flax" OR "Acacia hindsii" OR "Sand Reedgrass" OR "Acacia cochliacantha" OR "Maximilian Sunflower" OR "Desmodesmus communis" OR "Purple Tussockgrass " OR "Salix cinerea" OR "Entire-leaved Cotoneaster" OR "Chloroidium saccharophilum" OR "Meyer Lilac" OR "Cayratia japonica" OR "Stinkingtoe " OR "Roystonea regia" OR "Guianese Colicwood" OR "Linum perenne" OR "Marsh Hedgenettle" OR "Sporobolus rigidus" OR "Lily Order" OR "Helianthus maximiliani" OR "Sedge" OR "Nassella pulchra" OR "European Buckthorn " OR "Cotoneaster integrifolius" OR "Gray-Box " OR "Syringa meyeri" OR "Shortpod Mustard" OR "Hymenaea courbaril" OR "Smith's Mint" OR "Myrsine floridana" OR "Catnip Response Kiwi" OR "Stachys palustris" OR "Rice Flower" OR "Liliales" OR "Queen Palm " OR "Carex secta" OR "Missouri Milkvetch" OR "Rhamnus cathartica" OR "Little-pod False Flax" OR "Eucalyptus moluccana" OR "Whitebeam" OR "Hirschfeldia incana" OR "American Bellflower" OR "Mentha x smithiana" OR "Rusty Staggerbush " OR "Actinidia macrosperma" OR "White Sagebrush" OR "Pimelea elongata" OR "Awned Sedge " OR "Syagrus romanzoffiana" OR "Bittercress" OR "Astragalus missouriensis" OR "French Plantain" OR "Camelina microcarpa" OR "Gray Goldenrod" OR "Sorbus aria" OR "Gymnosperm Division" OR "Campanula americana" OR "Bearded Wheatgrass" OR "Lyonia ferruginea" OR "Watershield, Purple Wen-Dock" OR "Artemisia ludoviciana" OR "Brigalow Spearwood" OR "Carex atherodes" OR "Fowl Blue Grass " OR "Cardamine sp." OR "Jimmyweed" OR "Musa x paradisiaca" OR "Purple Kiwi" OR "Solidago nemoralis" OR "Florida Gamagrass" OR "Coniferophyta" OR "Red Algae" OR "Elymus trachycaulus ssp. subsecundus" OR "Cataract Palm" OR "Brasenia schreberi" OR "Macarthur Palm" OR "Acacia harpophylla" OR "Michaux's Wormwood " OR "Poa palustris" OR "Wolfberry" OR "Isocoma sp." OR "Silverweed Cinquefoil" OR "Actinidia melanandra" OR "Rough Cinquefoil" OR "Tripsacum dactyloides var. floridanum" OR "Orange Wattle" OR "Pterocladiella capillacea" OR "Formosa Firethorn" OR "Chamaedorea cataractarum" OR "Privet " OR "Ptychosperma macarthurii" OR "Needlegrass" OR "Artemisia michauxiana" OR "Coastal Sagebrush" OR "Symphoricarpos occidentalis" OR "Cowparsnip" OR "Potentilla anserina" OR "Dyer's Greenweed " OR "Potentilla norvegica" OR "Ontario Lobelia" OR "Acacia saligna" OR "Needleleaf Sedge" OR "Pyracantha koidzumii" OR "Grevillea" OR "Ligustrum x ibolium" OR "Willowherb " OR "Eleocharis cellulosa" OR "Koromiko" OR "Artemisia californica" OR "Broom Teatree" OR "Heracleum sp." OR "New Zealand Flax" OR "Genista tinctoria" OR "Burkwood Viburnum" OR "Lobelia kalmii" OR "Water Primrose" OR "Carex duriuscula" OR "Creeping Liriope" OR "Grevillea sp." OR "Montbretia " OR "Epilobium montanum" OR "Texas Colubrina" OR "Veronica stricta" OR "Silver Vine " OR "Leptospermum scoparium" OR "Russian Blue Lettuce " OR "Phormium colensoi" OR "Earlyleaf Brome" OR "Viburnum x burkwoodii" OR "Northern Bedstraw" OR "Ludwigia hexapetala" OR "Hood's Sedge" OR "Liriope spicata" OR "Wild Basil " OR "Crocosmia x crocosmiiflora" OR "Bastard Cedar" OR "Colubrina texensis" OR "Black Caraway" OR "Actinidia polygama" OR "Dahoon" OR "Lactuca tatarica" OR "Culver's Root" OR "Bromus latiglumis" OR "Common Tansy" OR "Galium boreale" OR "Prairie Onion" OR "Carex hoodii" OR "Lowland Yellow Loosestrife" OR "Clinopodium vulgare" OR "Flat-spine Sheepburr" OR "Guazuma ulmifolia" OR "Branched Centaury " OR "Bunium persicum" OR "Chinese Box-orange" OR "Ilex cassine" OR "Clematis" OR "Veronicastrum virginicum" OR "Showy Goldenrod" OR "Tanacetum vulgare" OR "Flea-Bane" OR "Allium stellatum" OR "Mexican Petunia" OR "Lysimachia hybrida" OR "Manyspike Flatsedge" OR "Lappula occidentalis" OR "Amur Grape" OR "Centaurium pulchellum" OR "Green Milkweed " OR "Atalantia buxifolia" OR "Groundplum Milkvetch" OR "Clematis sp." OR "Threadleaf Sedge" OR "Solidago speciosa" OR "Woolly Mullein" OR "Erigeron sp." OR "Sweet Joepyeweed" OR "Ruellia angustifolia" OR "Soft Boronia" OR "Cyperus polystachyos" OR "Bog Asphodel" OR "Vitis amurensis" OR "Rigid Goldenrod" OR "Asclepias viridiflora" OR "Bracted Vervain " OR "Astragalus crassicarpus" OR "Paleseed Indianwheat" OR "Carex filifolia" OR "Montana Wheatgrass" OR "Verbascum thapsus" OR "Prairie Reedgrass" OR "Eutrochium purpureum" OR "Torrey Rush" OR "Boronia mollis" OR "Whitespot Giant Arum" OR "Narthecium ossifragum" OR "Willow Weed" OR "Solidago rigida ssp. humilis" OR "Currant" OR "Verbena bracteata" OR "Skyblue Aster" OR "Plantago virginica" OR "Spiderwort" OR "Elymus albicans" OR "Diospyros" OR "Calamagrostis montanensis" OR "Flat-top Goldentop" OR "Juncus torreyi" OR "Riddell's Goldenrod" OR "Amorphophallus paeoniifolius" OR "Common Raspwort" OR "Epilobium sp." OR "Surinam Cherry" OR "Ribes sp." OR "Flame-Of-The-Woods" OR "Symphyotrichum oolentangiense" OR "Wyoming Big Sagebrush" OR "Tradescantia occidentalis" OR "Sand Sagebrush" OR "Diospyros sp." OR "Brittle Cactus " OR "Euthamia graminifolia" OR "Mascarene Island Leafflower " OR "Solidago riddellii" OR "Kudzu" OR "Gonocarpus tetragynus" OR "Michigan lily " OR "Eugenia uniflora" OR "Swamp Bay" OR "Ixora coccinea" OR "Prairie Milkvetch" OR "Artemisia tridentata ssp. wyomingensis" OR "Fiddleleaf Hawksbeard" OR "Artemisia filifolia" OR "Pale-spike Lobelia" OR "Opuntia fragilis" OR "Inland Rush" OR "Phyllanthus tenellus" OR "Norfolk Island Pine " OR "Pueraria montana" OR "Kangeroo Lobelia" OR "Lilium michiganense" OR "European Spindletree" OR "Persea palustris" OR "Wayfaring-Tree" OR "Astragalus laxmannii var. robustior" OR "White Beaksedge " OR "Crepis runcinata" OR "Chewing's Fescue" OR "Lobelia spicata" OR "Largefruit Bladderpod" OR "Juncus interior" OR "Mexican Pricklypoppy" OR "Araucaria heterophylla" OR "Variable Plantain" OR "Dampiera diversifolia" OR "Perennial Soybean" OR "Euonymus europaeus" OR "Laurel Greenbrier" OR "Viburnum lantana" OR "Bristly Buttercup" OR "Rhynchospora alba" OR "Smooth Scouringrush" OR "Festuca rubra ssp. fallax" OR "Curlycup Gumweed" OR "Physaria macrocarpa" OR "Closed Bottle Gentian " OR "Argemone mexicana" OR "Doveweed" OR "Plantago varia" OR "Eastern Hayscented Fern" OR "Neonotonia wightii" OR "Great Plains Sedge" OR "Smilax laurifolia" OR "Chinese Fan Palm" OR "Ranunculus pensylvanicus" OR "Chinese Box" OR "Equisetum laevigatum" OR "Sea Mist Westringia" OR "Grindelia squarrosa" OR "Roundleaf Sundew" OR "Gentiana andrewsii" OR "Tussock Cottongrass " OR "Croton texensis" OR "Small Cranberry" OR "Dennstaedtia punctilobula" OR "Munro's Globemallow" OR "Carex melanostachya" OR "Tex-Mex Tobacco" OR "Livistona chinensis" OR "Spurge" OR "Murraya paniculata" OR "Prairie Rose" OR "Westringia brevifolia" OR "Stiff Sunflower" OR "Drosera rotundifolia" OR "Coral-pea " OR "Eriophorum vaginatum" OR "Red Toothbrushes" OR "Vaccinium oxycoccos" OR "Ribbonwood" OR "Sphaeralcea munroana" OR "Dahlia" OR "Nicotiana plumbaginifolia" OR "Great Blue Lobelia" OR "Euphorbia drummondii" OR "Golden-tongue Owl-clover" OR "Rosa arkansana" OR "Purple Locoweed" OR "Helianthus pauciflorus" OR "Cowitch" OR "Hardenbergia violacea" OR "Midsorus Fern" OR "Grevillea hookeriana" OR "Ladyfern" OR "Plagianthus regius" OR "Dahlia merkii" OR "Lobelia siphilitica" OR "Orthocarpus luteus" OR "Oxytropis lambertii" OR "Mucuna pruriens" OR "Blechnum sp." OR "Athyrium sp." OR "Apis mellifera ligustica" OR "Italian Honeybee" OR "Pimelodidae" OR "Long-Whiskered Catfish Family" OR "Euxesta eluta" OR "Picture-winged Fly" OR "Ceraeochrysa cubana" OR "Green Lacewing" OR "Chaetopsis massyla" OR "Lacewing" OR "Ceraeochrysa cincta" OR "Eucalyptus Snout Beetle" OR "Gonipterus scutellatus" OR "Italian Tree Frog" OR "Hyla intermedia" OR "Solenopsis Mealybug" OR "Chrysoperla externa" OR "Scrub Typhus Mite" OR "Phenacoccus solenopsis" OR "Ladybeetles" OR "Leptotrombidium deliense" OR "Kelly's Citrus Thrip" OR "Tenuisvalvae sp." OR "Bagrada Bug" OR "Pezothrips kellyanus" OR "Fruit Fly" OR "Bagrada hilaris" OR "Calanoid Copepod " OR "Bactrocera latifrons" OR "Cuvier's Foam Froglet" OR "Pseudodiaptomus inopinus" OR "Amur Sleeper Fish" OR "Physalaemus cuvieri" OR "Sugarcane Borer" OR "Perccottus glenii" OR "Neotropical Silversides" OR "Diatraea flavipennella" OR "Southern Red-backed Vole" OR "Odontesthes humensis" OR "Hide Beetle " OR "Myodes gapperi" OR "Chigger Mite" OR "Dermestes maculatus" OR "Mite" OR "Leptotrombidium fletcheri" OR "Glasshouse Potato Wasp" OR "Eutrombicula sp." OR "Johnstone's Whistling Frog" OR "Aphelinus abdominalis" OR "Brown Garden Snail" OR "Eleutherodactylus johnstonei" OR "Caddisfly" OR "Cornu aspersum" OR "Smooth Newt" OR "Calamoceras marsupus" OR "Sand Fly" OR "Lissotriton vulgaris" OR "House Dust Mite" OR "Phlebotomus papatasi" OR "Chrysomelid Beetle" OR "Dermatophagoides sp." OR "Flagellated Protozoan" OR "Cerotoma arcuata" OR "Tick" OR "Giardia lamblia" OR "Rotifer" OR "Hyalomma asiaticum" OR "Green Rock Lobster" OR "Lecane papuana" OR "Liza" OR "Sagmariasus verreauxi" OR "Copepod" OR "Mugil liza" OR "Painted Frog" OR "Parvocalanus crassirostris" OR "Jassid" OR "Discoglossus pictus" OR "White Seabass " OR "Jacobiella facialis" OR "Killifish" OR "Atractoscion nobilis" OR "Ciliate" OR "Austrolebias nigrofasciatus" OR "Leopard Tree Frog" OR "Trichodina sp." OR "Mealybug" OR "Boana pardalis" OR "Bullseye Puffer" OR "Ferrisia sp." OR "Midge Subfamily" OR "Sphoeroides annulatus" OR "African Citrus Psyllid" OR "subfamily Tanypodinae" OR "Marjorie's Hardyhead" OR "Trioza erytreae" OR "Argasid Tick" OR "Craterocephalus marjoriae" OR "White Bream " OR "Ornithodoros parkeri" OR "Argentine Black and White Tegu" OR "Blicca bjoerkna" OR "Tetra" OR "Salvator merianae" OR "Midge" OR "Astyanax lacustris" OR "Lesser Treefrog" OR "Paratanytarsus dissimilis" OR "Menwig Frog" OR "Dendropsophus minutus" OR "Ecuadorian Worm" OR "Physalaemus albonotatus" OR " Great Fruit-eating Bat" OR "Tagia ecuadori" OR "Calanoid Copepod" OR "Corynoneura sp." OR "Yellow-spotted River Turtle" OR "Artibeus lituratus" OR "Western Bean Cutworm" OR "Acartia pacifica" OR "Nematode" OR "Lecane inermis" OR "Common Wall Lizard" OR "Podocnemis unifilis" OR "Arctic Shrew" OR "Striacosta albicosta" OR "Mountain Chicken Frog" OR "Leptotrombidium sp." OR "Stingless Bee" OR "Cephalodella paggiae" OR "Trap-Jaw Ant" OR "Pristionchus pacificus" OR "Common New Zealand Skink" OR "Podarcis muralis" OR "Barred Grunter" OR "Sorex arcticus" OR "Rainbow Fish Order" OR "Leptodactylus fallax" OR "Pear Leaf Blister Moth" OR "Hypotrigona ruspolii" OR "Spotted Rose Snapper" OR "Odontomachus simillimus" OR "Hawthorn Red Midget Moth" OR "Oligosoma polychroma" OR "Spotted Orb-weaver" OR "Amniataba percoides" OR "Scrub Tick" OR "Atheriniformes" OR "Leafcurl Plum Aphid" OR "Leucoptera scitella" OR "Fairy Shrimp" OR "Lutjanus guttatus" OR "Southern Bog Lemming" OR "Phyllonorycter corylifoliella" OR "Earthworm" OR "Neoscona theisi" OR "Planthopper" OR "Haemaphysalis longicornis" OR "San Diego Fairy Shrimp " OR "Brachycaudus helichrysi" OR "Water Flea " OR "Dendrocephalus brasiliensis" OR "Pygmy Shrew" OR "Synaptomys cooperi" OR "Small Cabbage White" OR "Octodrilus complanatus" OR "Solostamenides" OR "Hyalesthes obsoletus" OR "Trematoda Subclass" OR "Branchinecta sandiegonensis" OR "Wolf Spider" OR "Alona glabra" OR "Flatworm" OR "Sorex hoyi" OR "Tapeworm Order" OR "Pieris rapae crucivora" OR "Predatory Spider" OR "Solostamenides platyorchis" OR "Snail" OR "Digenea" OR "Smaller Tea Tortrix" OR "Lycosa terrestris" OR "Trematode Family" OR "Ligophorus uruguayensis" OR "Snake Suborder" OR "Tetraphyllidea" OR "Wetland Giant Wolf Spider " OR "Misumenops tricuspidatus" OR "Dark Wolf Spider" OR "Bellamya sp." OR "Cabbage Webworm" OR "Adoxophyes honmai" OR "Spider Mite" OR "Renicolidae" OR "Chinese Medaka" OR "Ophidia" OR "Hogna helluo" OR "Pardosa birmanica" OR "Hellula undalis" OR "Tetranychus bastosi" OR "Oryzias sinensis" OR "Echinostoma paraensei")

1. The **Animal (all)** search strategy was revised to include the following terms:

tiab: ("Apis mellifera ligustica" OR "Italian Honeybee" OR "Pimelodidae" OR "Long-Whiskered Catfish Family" OR "Euxesta eluta" OR "Picture-winged Fly" OR "Ceraeochrysa cubana" OR "Green Lacewing" OR "Chaetopsis massyla" OR "Lacewing" OR "Ceraeochrysa cincta" OR "Eucalyptus Snout Beetle" OR "Gonipterus scutellatus" OR "Italian Tree Frog" OR "Hyla intermedia" OR "Solenopsis Mealybug" OR "Chrysoperla externa" OR "Scrub Typhus Mite" OR "Phenacoccus solenopsis" OR "Ladybeetles" OR "Leptotrombidium deliense" OR "Kelly's Citrus Thrip" OR "Tenuisvalvae sp." OR "Bagrada Bug" OR "Pezothrips kellyanus" OR "Fruit Fly" OR "Bagrada hilaris" OR "Calanoid Copepod " OR "Bactrocera latifrons" OR "Cuvier's Foam Froglet" OR "Pseudodiaptomus inopinus" OR "Amur Sleeper Fish" OR "Physalaemus cuvieri" OR "Sugarcane Borer" OR "Perccottus glenii" OR "Neotropical Silversides" OR "Diatraea flavipennella" OR "Southern Red-backed Vole" OR "Odontesthes humensis" OR "Hide Beetle " OR "Myodes gapperi" OR "Chigger Mite" OR "Dermestes maculatus" OR "Mite" OR "Leptotrombidium fletcheri" OR "Glasshouse Potato Wasp" OR "Eutrombicula sp." OR "Johnstone's Whistling Frog" OR "Aphelinus abdominalis" OR "Brown Garden Snail" OR "Eleutherodactylus johnstonei" OR "Caddisfly" OR "Cornu aspersum" OR "Smooth Newt" OR "Calamoceras marsupus" OR "Sand Fly" OR "Lissotriton vulgaris" OR "House Dust Mite" OR "Phlebotomus papatasi" OR "Chrysomelid Beetle" OR "Dermatophagoides sp." OR "Flagellated Protozoan" OR "Cerotoma arcuata" OR "Tick" OR "Giardia lamblia" OR "Rotifer" OR "Hyalomma asiaticum" OR "Green Rock Lobster" OR "Lecane papuana" OR "Liza" OR "Sagmariasus verreauxi" OR "Copepod" OR "Mugil liza" OR "Painted Frog" OR "Parvocalanus crassirostris" OR "Jassid" OR "Discoglossus pictus" OR "White Seabass " OR "Jacobiella facialis" OR "Killifish" OR "Atractoscion nobilis" OR "Ciliate" OR "Austrolebias nigrofasciatus" OR "Leopard Tree Frog" OR "Trichodina sp." OR "Mealybug" OR "Boana pardalis" OR "Bullseye Puffer" OR "Ferrisia sp." OR "Midge Subfamily" OR "Sphoeroides annulatus" OR "African Citrus Psyllid" OR "subfamily Tanypodinae" OR "Marjorie's Hardyhead" OR "Trioza erytreae" OR "Argasid Tick" OR "Craterocephalus marjoriae" OR "White Bream " OR "Ornithodoros parkeri" OR "Argentine Black and White Tegu" OR "Blicca bjoerkna" OR "Tetra" OR "Salvator merianae" OR "Midge" OR "Astyanax lacustris" OR "Lesser Treefrog" OR "Paratanytarsus dissimilis" OR "Menwig Frog" OR "Dendropsophus minutus" OR "Ecuadorian Worm" OR "Physalaemus albonotatus" OR "Great Fruit-eating Bat" OR "Tagia ecuadori" OR "Calanoid Copepod" OR "Corynoneura sp." OR "Yellow-spotted River Turtle" OR "Artibeus lituratus" OR "Western Bean Cutworm" OR "Acartia pacifica" OR "Nematode" OR "Lecane inermis" OR "Common Wall Lizard" OR "Podocnemis unifilis" OR "Arctic Shrew" OR "Striacosta albicosta" OR "Mountain Chicken Frog" OR "Leptotrombidium sp." OR "Stingless Bee" OR "Cephalodella paggiae" OR "Trap-Jaw Ant" OR "Pristionchus pacificus" OR "Common New Zealand Skink" OR "Podarcis muralis" OR "Barred Grunter" OR "Sorex arcticus" OR "Rainbow Fish Order" OR "Leptodactylus fallax" OR "Pear Leaf Blister Moth" OR "Hypotrigona ruspolii" OR "Spotted Rose Snapper" OR "Odontomachus simillimus" OR "Hawthorn Red Midget Moth" OR "Oligosoma polychroma" OR "Spotted Orb-weaver" OR "Amniataba percoides" OR "Scrub Tick" OR "Atheriniformes" OR "Leafcurl Plum Aphid" OR "Leucoptera scitella" OR "Fairy Shrimp" OR "Lutjanus guttatus" OR "Southern Bog Lemming" OR "Phyllonorycter corylifoliella" OR "Earthworm" OR "Neoscona theisi" OR "Planthopper" OR "Haemaphysalis longicornis" OR "San Diego Fairy Shrimp " OR "Brachycaudus helichrysi" OR "Water Flea " OR "Dendrocephalus brasiliensis" OR "Pygmy Shrew" OR "Synaptomys cooperi" OR "Small Cabbage White" OR "Octodrilus complanatus" OR "Solostamenides" OR "Hyalesthes obsoletus" OR "Trematoda Subclass" OR "Branchinecta sandiegonensis" OR "Wolf Spider" OR "Alona glabra" OR "Flatworm" OR "Sorex hoyi" OR "Tapeworm Order" OR "Pieris rapae crucivora" OR "Predatory Spider" OR "Solostamenides platyorchis" OR "Snail" OR "Digenea" OR "Smaller Tea Tortrix" OR "Lycosa terrestris" OR "Trematode Family" OR "Ligophorus uruguayensis" OR "Snake Suborder" OR "Tetraphyllidea" OR "Wetland Giant Wolf Spider " OR "Misumenops tricuspidatus" OR "Dark Wolf Spider" OR "Bellamya sp." OR "Cabbage Webworm" OR "Adoxophyes honmai" OR "Spider Mite" OR "Renicolidae" OR "Chinese Medaka" OR "Ophidia" OR "Hogna helluo" OR "Pardosa birmanica" OR "Hellula undalis" OR "Tetranychus bastosi" OR "Oryzias sinensis" OR "Echinostoma paraensei")

# Version 1.43, Commit d3e05141d08: 12.23.2019

## Updated the Environmental Fate (beta) search strategy in the Evidence Stream category

The Environmental Fate (Beta) search strategy was revised to identify literature dealing with *destruction via incineration*.  The following terms were added to the Environmental Fate (beta) search string:

((destroy OR destroyed OR destroys OR destruction OR removal OR remove OR removed OR removes) AND (combust OR combusted OR combustion OR incinerate OR incinerated OR incineration OR incinerator OR incinerators))

**OLD QUERY**

tiab: ("bioaccumulation" OR "bioconcentration" OR "biodegradability" OR "biodegradation" OR "bioisomerization" OR "biomagnification" OR "biotransformation" OR "dechlorination" OR "degradation" OR "dehalogenation" OR "fate" OR "food web" OR "groundwater" OR "hydrolysis" OR "landfill" OR "persistence" OR "photodegradation" OR "photolysis" OR "phototransformation" OR "sediment" OR "sludge" OR "soil" OR "trophic magnification" OR "volatilization" OR "waste" OR "wastewater" OR ( ("concentration" OR "concentrations" OR "evaporation rates" OR "reaction" OR "sorption") AND ("aquifer" OR "atmospheric" OR "tropospheric" OR "water") ) )

**NEW QUERY**

tiab: ("bioaccumulation" OR "bioconcentration" OR "biodegradability" OR "biodegradation" OR "bioisomerization" OR "biomagnification" OR "biotransformation" OR "dechlorination" OR "degradation" OR "dehalogenation" OR "fate" OR "food web" OR "groundwater" OR "hydrolysis" OR "landfill" OR "persistence" OR "photodegradation" OR "photolysis" OR "phototransformation" OR "sediment" OR "sludge" OR "soil" OR "trophic magnification" OR "volatilization" OR "waste" OR "wastewater" OR ( ("concentration" OR "concentrations" OR "evaporation rates" OR "reaction" OR "sorption") AND ("aquifer" OR "atmospheric" OR "tropospheric" OR "water") ) OR ( ("destroy" OR "destroyed" OR "destroys" OR "destruction" OR "removal" OR "remove" OR "removed" OR "removes") AND ("combust" OR "combusted" OR "combustion" OR "incinerate" OR "incinerated" OR "incineration" OR "incinerator" OR "incinerators") ) )

# Version 1.43, Commit 756dd59472d: 12.23.2019

## Added new tag query (Physical Chemistry (beta)) to the Evidence Stream category

Physical Chemistry (beta) was added as a new query in the Evidence Stream category. This query is shown below:

tiab: ( ("physical form" OR "physical state" OR "physical chemistry" OR "physical properties" AND ("solid" OR "liquid" OR "gaseous state" OR "color" OR "scent" OR "odor" OR "odour" OR "smell") ) OR "melting point" OR "boiling point" OR "density" OR "vapor pressure" OR "vapor density" OR "water solubility" OR "aqueous solubility" OR "aqueous saturation point" OR "water saturation point" OR "octanol:water partition coefficient" OR "octanol-water partition coefficient" OR "octanol/water partition coefficient" OR "octanol water partition coefficient" OR "Kow" OR "Henry’s Law constant" OR "flash point" OR "autoflammability" OR "viscosity" OR "refractive index" OR "dielectric constant")

# Version 1.43, Commit 3d4ee311a4f: 11.18.2019

## Updated the Ecotoxicity (Animal and Plant) query in the Evidence Stream category

The Ecotoxicity (Animal and Plant) query terms for fungi, Honeybee and bird were modified as follows:

~~Fungi OR Honeybee OR bird)~~ bird OR Seed OR Seed? OR Honeybee? OR Honeybee OR fungus OR fungi OR Plant OR Plant?)

# Version 1.43, Commit 2dab8473a7d: 11.13.2019

## Updated Methyl heptafluorobutyrate PFAS query

Modified the Methyl heptafluorobutyrate query (replaced “perfluorobutanob: “perfluorobutyric acid“ic acid” with “perfluorobutanoic acid”)

**OLD QUERY**

tiab:"356-24-1" OR tiab:"butanoic acid, 2,2,3,3,4,4,4-heptafluoro-" OR tiab:"butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, methyl ester" OR tiab:"einecs 206-600-0" OR tiab:"methyl heptafluorobutanoate" OR tiab:"methyl heptafluorobutyrate" OR tiab:"heptafluorobutyryl methyl ester" OR tiab:"375-22-4" OR tiab:"heptafluorobutanoic acid" OR tiab:"heptafluorobutyric acid" OR tiab:"perfluorobutanob:"perfluorobutyric acid"ic acid" OR tiab:"perfluorobutyric acid" OR suppchem:"heptafluorobutyryl methyl ester" OR suppchem:"perfluorobutyric acid" OR tiab:"butanoic acid, heptafluoro-, methyl ester"

**NEW QUERY**

tiab:"356-24-1" OR tiab:"butanoic acid, 2,2,3,3,4,4,4-heptafluoro-" OR tiab:"butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, methyl ester" OR tiab:"einecs 206-600-0" OR tiab:"methyl heptafluorobutanoate" OR tiab:"methyl heptafluorobutyrate" OR tiab:"heptafluorobutyryl methyl ester" OR tiab:"375-22-4" OR tiab:"heptafluorobutanoic acid" OR tiab:"heptafluorobutyric acid" OR tiab:"perfluorobutanoic acid" OR tiab:"perfluorobutyric acid" OR suppchem:"heptafluorobutyryl methyl ester" OR suppchem:"perfluorobutyric acid" OR tiab:"butanoic acid, heptafluoro-, methyl ester"

# Version 1.43, Commit 94e755: 11.13.2019

## Updated Evidence Stream: Modified the Ecotoxicity (animal and plant) query; Added Environmental Fate (beta) query; and modified the Human search query

## Modified the Ecotoxicity (animal and plant) query by adding the following terms: Daphnia, seed, larvae, larva, alga, bird, Seed, Seed?, Honeybee?, Honeybee, fungus, fungi, Plant, plant

**OLD QUERY**

tiab: (animal\* OR mice OR mus OR mouse OR murine OR rats OR rat OR murinae OR muridae OR "cotton rat" OR "cotton rats" OR hamster\* OR criceti?ae OR rodent\* OR pigs OR pig OR swine\* OR piglet\* OR "guinea pigs" OR "guinea pig" OR cavia OR callithrix OR marmoset\* OR cebuella OR hapale OR octodon OR chinchilla\* OR gerbillinae OR gerbil\* OR rabbit\* OR hares OR hare OR cats OR cat OR carus OR felis OR dogs OR dog OR canine\* OR canis OR sheep\* OR mouflon\* OR ovis OR goat\* OR capra OR haplorhini OR monkey\* OR anthropoid\* OR saguinus OR tamarin\* OR leontopithecus OR hominidae OR ape OR apes OR "pan paniscus" OR bonobo\* OR "pan troglodytes" OR gibbon\* OR nomascus OR symphalangus OR chimpanzee\* OR prosimian\* OR pongidae OR gorilla\* OR "pongo pygmaeus" OR orangutan\* OR lemur\* OR lemuridae OR horse\* OR equus OR cow OR calf OR bull OR chicken\* OR gallus OR quail\* OR bird OR birds OR poultry OR fowl OR fowls OR reptil\* OR snake\* OR lizard\* OR turtle\* OR amphibia\* OR frog\* OR xenopus OR bombina OR salientia OR toad\* OR "epidalea calamita" OR salamander\* OR fish OR fishes OR pisces OR catfish OR perch OR percidae OR perca OR trout OR char OR salmon OR salvelinus OR minnow\* OR cyprinidae OR carp OR zebrafish OR "zebra fish" OR nematode\* OR elegans OR diptera OR flies OR dipteral OR drosophil\* OR squirrel\* OR chipmunk\* OR bear OR bears OR ursidae OR dolphin\* OR porpoise\* OR whale\* OR cetacea)

**NEW QUERY**

tiab: (animal\* OR mice OR mus OR mouse OR murine OR rats OR rat OR murinae OR muridae OR "cotton rat" OR "cotton rats" OR hamster\* OR criceti?ae OR rodent\* OR pigs OR pig OR swine\* OR piglet\* OR "guinea pigs" OR "guinea pig" OR cavia OR callithrix OR marmoset\* OR cebuella OR hapale OR octodon OR chinchilla\* OR gerbillinae OR gerbil\* OR rabbit\* OR hares OR hare OR cats OR cat OR carus OR felis OR dogs OR dog OR canine\* OR canis OR sheep\* OR mouflon\* OR ovis OR goat\* OR capra OR haplorhini OR monkey\* OR anthropoid\* OR saguinus OR tamarin\* OR leontopithecus OR hominidae OR ape OR apes OR "pan paniscus" OR bonobo\* OR "pan troglodytes" OR gibbon\* OR nomascus OR symphalangus OR chimpanzee\* OR prosimian\* OR pongidae OR gorilla\* OR "pongo pygmaeus" OR orangutan\* OR lemur\* OR lemuridae OR horse\* OR equus OR cow OR calf OR bull OR chicken\* OR gallus OR quail\* OR bird OR birds OR poultry OR fowl OR fowls OR reptil\* OR snake\* OR lizard\* OR turtle\* OR amphibia\* OR frog\* OR xenopus OR bombina OR salientia OR toad\* OR "epidalea calamita" OR salamander\* OR fish OR fishes OR pisces OR catfish OR perch OR percidae OR perca OR trout OR char OR salmon OR salvelinus OR minnow\* OR cyprinidae OR carp OR zebrafish OR "zebra fish" OR nematode\* OR elegans OR diptera OR flies OR dipteral OR drosophil\* OR squirrel\* OR chipmunk\* OR bear OR bears OR ursidae OR dolphin\* OR porpoise\* OR whale\* OR cetacea OR Daphnia OR seed OR larvae OR larva OR alga OR bird OR Seed OR Seed? OR Honeybee? OR Honeybee OR fungus OR fungi OR Plant OR Plant?)

1. Added Environmental Fate (beta) as a new query to the existing Evidence Stream category

tiab: ("bioaccumulation" OR "bioconcentration" OR "biodegradability" OR "biodegradation" OR "bioisomerization" OR "biomagnification" OR "biotransformation" OR "dechlorination" OR "degradation" OR "dehalogenation" OR "fate" OR "food web" OR "groundwater" OR "hydrolysis" OR "landfill" OR "persistence" OR "photodegradation" OR "photolysis" OR "phototransformation" OR "sediment" OR "sludge" OR "soil" OR "trophic magnification" OR "volatilization" OR "waste" OR "wastewater" OR ( ("concentration" OR "concentrations" OR "evaporation rates" OR "reaction" OR "sorption") AND ("aquifer" OR "atmospheric" OR "tropospheric" OR "water") ) )

1. Modified the Human query by adding tiab\_stemmed(epidemiologic) to the existing query

**OLD QUERY**

mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*)

**NEW QUERY**

mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*) OR tiab\_stemmed:(epidemiologic)

# Version 1.43, Commit f48a2cc9054: 11.06.2019

## Removed duplicates from and added “(4-nonylphenoxy)acetic acid” terms to the PFAS query in the PFAS category

Duplicate terms identified in the PFAS query were removed, and “(4-nonylphenoxy)acetic acid”) terms were added.

(tiab:("(4-nonylphenoxy)acetic acid") OR tiab:("nonylphenoxy acetic acid") OR tiab:("nonyl-phenoxy acetic acid") OR tiab:("np1ec") OR tiab:("4-nonylphenoxyacetic acid") OR tiab:("2-(4-nonylphenoxy)acetic acid") OR tiab:("4-nonylphenoxycarboxylic acid") OR tiab:("4-nonylphenol carboxylic acid") OR tiab:("nonylphenol monocarboxylate") OR tiab:("nonylphenol 1-carboxylic acid") OR tiab:("(p-nonylphenoxy)acetic acid") OR tiab:("3115-49-9"))

# Version 1.43, Commit cf374789266: 10.31.2019

## Changed name to PFAS query name from PFAS\_150 to PFAS

The name of the PFAS query was revised from PFAS-150 to PFAS. Reference to a specific number was removed from the PFAS query, to allow for future addition of search terms without requiring a change to the query name.

# Version 1.43, Commit a29e9a29b52: 10.31.2019

## Changed name of PFAS query name in the PFAS Category from PFAS\_150 to PFAS\_430 and added additional search terms

We received two files, PFAS\_150 (193 chemicals) and PFAS\_430 (481 chemicals). We used the following columns to develop the search strategies:

* *Preferred\_name*
* *CAS-RN*
* *Synonyms*
* *Substance\_Name*
	+ *Only PFAS\_430 has this column*
	+ *There are only 11 entries for which the values in Preferred\_name and Substance\_name columns are different.*

We merged 193 and 481 chemicals and removed all the duplicates based on Preferred\_name. There were 502 unique chemicals. There were 7 duplicate entries which had the same DSSTox\_Substance\_iD and CAS-RN, but different Preferred\_name. We merged these duplicates and kept the Preferred name from the 481 list. There are 495 unique DSSTox\_Substance\_iD.

# Version 1.43, Commit 6c24fc27925: 10.21.2019

## Updated PFAS\_150 query with CAS number, chemical name and synonym search through chemical synonym search tool in SWIFT-Review

The PFAS\_150 query was updated with CAS number, chemical name and synonym search through the chemical synonym search tool in SWIFT-Review. We ran the **Chemical Synonym tool** from SWIFT-Review on the Preferred\_name, Substance\_name (for entries which had different Preferred\_names), CAS-RN and each of the synonyms from the synonyms list. The tool generated the list of synonyms for each of the chemicals. The list of generated synonyms also included MeSH terms and SuppChem terms, if available.

# Version 1.43, Commit 14f0f17aaac9: 10.14.2019

## Added SWIFT-Review chemical synonyms output to PFAS 150 queries and implemented Bug Fix.

SWIFT-Review chemical synonym output was added to PFAS 150 queries. In addition, a bug fix was implemented to resolve the issue where the API would download only 139 queries instead of all 193, because of extra " in the Master\_PFAS\_150\_queries file.

# Version 1.43, Commit 2f12223579f: 9.25.2019

## Updated Ecotoxicity (Animal and plant) query in the Evidence Stream category

The Ecotoxicity (Animal and plant) query was modified by adding the following terms to the existing Ecotoxicity (Animal and plant) query: OR Daphnia OR seed OR larvae OR larva OR alga OR fungi OR Honeybee OR bird)

# Version 1.43, Commit 0381fa0238f: 9.11.2019

## Updated Human query in the Evidence Stream category

The Human query in the Evidence Stream category was modified as follows to add “epidemiologic”:

 mesh\_mh:("occupational groups" OR "occupational exposure") OR tiab:(occupation\* OR workplace OR "work place" OR "work-related" OR administrator\* OR aides OR assistant\* OR crew OR crews OR employee\* OR personnel OR professional OR staff OR technician\* OR worker\* OR educator\* OR instructor\* OR teacher\* OR clinician\* OR doctor\* OR physician\* OR pharmacist\* OR nurs\* OR residents OR veterinarian\*) OR tiab\_stemmed:(epidemiologic”)

# Version 1.43, Commit e9da8ed7dad: 9.1.2019

## PFAS 150 was added as a new query to the Evidence Stream category

PFAS 150 query was added as a new Evidence Stream category as shown below.

tiab:( "((2,2,3,3-Tetrafluoropropoxy)methyl)oxirane" OR "(1H,1H,3H-Perfluoropropoxy)methyloxirane" OR "19932-26-4" OR "2-((2,2,3,3-Tetrafluoropropoxy)methyl)oxirane" OR "2-[(2,2,3,3-Tetrafluoropropoxy)methyl]oxirane" OR "3-(2,2,3,3-tetrafluoropropoxy)-1,2-epoxypropane" OR "3-(2,2,3,3-Tetrafluoropropoxy)-1,2-propenoxide" OR "EINECS 243-431-1" OR "Glycidyl 2,2,3,3-tetrafluoropropyl ether" OR "Oxirane, 2-[(2,2,3,3-tetrafluoropropoxy)methyl]-" OR "19932-26-4" OR "((2,2,3,3-Tetrafluoropropoxy)methyl)oxirane" )

tiab:( "((Perfluorooctyl)ethyl)phosphonic acid" OR "(1H,1H,2H,2H-Heptadecafluorodecyl)phosphonic acid" OR "(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecyl)phosphonic acid" OR "80220-63-9" OR "Phosphonic acid, (3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)-" OR "80220-63-9" OR "((Perfluorooctyl)ethyl)phosphonic acid" )

tiab:( "(Heptafluorobutanoyl)pivaloylmethane" OR "1,1,1,2,2,3,3-Heptafluoro-7,7-dimethyl-4,6-octanedione" OR "17587-22-3" OR "2,2-Dimethyl-6,6,7,7,8,8,8-heptafluoro-3,5-octanedione" OR "3,5-Octanedione, 6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-" OR "6,6,7,7,8,8,8-Heptafluor-2,2-dimethyloctan-3,5-dion" OR "6,6,7,7,8,8,8-Heptafluoro-2,2-dimethyl-3,5-octanedione" OR "6,6,7,7,8,8,8-Heptafluoro-2,2-dimethyloctane-3,5-dione" OR "6,6,7,7,8,8,8-heptafluoro-2,2-dimetiloctano-3,5-diona" OR "EINECS 241-556-6" OR "Fod" OR "OCTANE-3,5-DIONE, 6,6,7,7,8,8,8-HEPTAFLUORO- 2,2-DIMETHYL-" OR "17587-22-3" OR "(Heptafluorobutanoyl)pivaloylmethane" )

tiab:( "(Heptafluoropropyl)(trimethyl)silane" OR "(Heptafluoropropyl)trimethylsilane" OR "3834-42-2" OR "Silane, (1,1,2,2,3,3,3-heptafluoropropyl)trimethyl-" OR "3834-42-2" OR "(Heptafluoropropyl)trimethylsilane" )

tiab:( "(Perfluoro-5-methylhexyl)ethyl 2-methylprop-2-enoate" OR "2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,8,8,8-dodecafluoro-7-(trifluoromethyl)octyl ester" OR "3,3,4,4,5,5,6,6,7,8,8,8-Dodecafluoro-7-(trifluoromethyl)octyl 2-methylprop-2-enoate" OR "50836-66-3" OR "50836-66-3" OR "(Perfluoro-5-methylhexyl)ethyl 2-methylprop-2-enoate" )

tiab:( "(Perfluorobutyryl)-2-thenoylmethane" OR "1,3-Hexanedione, 4,4,5,5,6,6,6-heptafluoro-1-(2-thienyl)-" OR "2-Thenoylperfluorobutyrylmethane" OR "4,4,5,5,6,6,6-Heptafluoro-1-(2-thienyl)-1,3-hexanedione" OR "4,4,5,5,6,6,6-Heptafluoro-1-(thiophen-2-yl)hexane-1,3-dione" OR "559-94-4" OR "Perfluorobutyryl-2-(thenoyl)methane" OR "559-94-4" OR "(Perfluorobutyryl)-2-thenoylmethane" )

tiab:( "1,1,1,2,2,3,3,4,4-Nonafluoro-6-iodohexane" OR "1,1,2,2-Tetrahydroperfluorohexyl iodide" OR "1,1,2,2-Tetrahydroperfluorohexyliodide" OR "2043-55-2" OR "EINECS 218-055-6" OR "Hexane, 1,1,1,2,2,3,3,4,4-nonafluoro-6-iodo-" OR "2043-55-2" OR "1,1,1,2,2,3,3,4,4-Nonafluoro-6-iodohexane" )

tiab:( "1,1,1,3,3-Pentafluorobutane" OR "144377-42-4" OR "406-58-6" OR "Butane, 1,1,1,3,3-pentafluoro-" OR "406-58-6" OR "1,1,1,3,3-Pentafluorobutane" )

tiab:( "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene, 1,1,1,2,2,3,3-heptafluoro-3-((trifluoroethenyl)oxy)propane and tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propane and 1,1,2,2-tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and tetrafluoroethene" OR "1,1-Difluoroethene, hexafluoropropene, 1-((trifluoroethenyl)oxy)heptafluoropropane, tetrafluoroethene polymer" OR "68182-34-3" OR "POLYFLGSID\_880594" OR "68182-34-3" OR "1,1-Difluoroethene, hexafluoropropene, 1-((trifluoroethenyl)oxy)heptafluoropropane, tetrafluoroethene polymer" )

tiab:( "1,11-Dodecadiene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-hexadecafluoro-" OR "1,8-Divinylperfluorooctane" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-Hexadecafluorododeca-1,11-diene" OR "35192-44-0" OR "35192-44-0" OR "1,8-Divinylperfluorooctane" )

tiab:( "1-(Perfluorofluorooctyl)propane-2,3-diol" OR "1,2-Undecanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-" OR "4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-Heptadecafluoroundecane-1,2-diol" OR "94159-84-9" OR "EINECS 303-265-3" OR "94159-84-9" OR "1-(Perfluorofluorooctyl)propane-2,3-diol" )

tiab:( "1-Bromo-1,1,2,2,3,3,3-heptafluoropropane" OR "1-Bromoheptafluoropropane" OR "422-85-5" OR "EINECS 207-023-7" OR "Heptafluoropropyl bromide" OR "Propane, 1-bromo-1,1,2,2,3,3,3-heptafluoro-" OR "422-85-5" OR "1-Bromoheptafluoropropane" )

tiab:( "1-Bromo-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoroheptane" OR "1-Bromopentadecafluoroheptane" OR "375-88-2" OR "EINECS 206-799-4" OR "Heptane, 1-bromo-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-" OR "Perfluoroheptyl bromide" OR "375-88-2" OR "1-Bromopentadecafluoroheptane" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, ion(1-), 1-(4-butoxy-1-naphthalenyl)tetrahydrothiophenium" OR "1146977-79-8" OR "209482-18-8" OR "POLYFLGSID\_883034" OR "209482-18-8" OR "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, ion(1-), 1-(4-butoxy-1-naphthalenyl)tetrahydrothiophenium" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, salt with sulfonium, dimethylphenyl- (1:1)" OR "220133-51-7" OR "220133-51-7" OR "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, salt with sulfonium, dimethylphenyl- (1:1)" )

tiab:( "1-Hexene, 3,3,4,4,5,5,6,6,6-nonafluoro-, polymer with ethene and 1,1,2,2-tetrafluoroethene" OR "1-Hexene, 3,3,4,4,5,5,6,6,6-nonafluoro-, polymer with ethene and tetrafluoroethene" OR "68258-85-5" OR "68258-85-5" OR "1-Hexene, 3,3,4,4,5,5,6,6,6-nonafluoro-, polymer with ethene and 1,1,2,2-tetrafluoroethene" )

tiab:( "1-Iodo-1H,1H,2H,2H-perfluoroheptane" OR "1,1,1,2,2,3,3,4,4,5,5-Undecafluoro-7-iodoheptane" OR "1682-31-1" OR "EINECS 216-862-8" OR "Heptane, 1,1,1,2,2,3,3,4,4,5,5-undecafluoro-7-iodo-" OR "1682-31-1" OR "1-Iodo-1H,1H,2H,2H-perfluoroheptane" )

tiab:( "1-Iodopentadecafluoroheptane" OR "1,1,1,2,2,3,3,4,4,5,5,6,6,7,7-Pentadecafluoro-7-iodoheptane" OR "335-58-0" OR "EINECS 206-393-7" OR "Heptane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7-pentadecafluoro-7-iodo-" OR "Perfluoroheptyl iodide" OR "335-58-0" OR "1-Iodopentadecafluoroheptane" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monoamide with N,N'-bis(2-aminoethyl)-1,2-ethanediamine" OR "64202-77-3" OR "POLYFLGSID\_880545" OR "64202-77-3" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monoamide with N,N'-bis(2-aminoethyl)-1,2-ethanediamine" )

tiab:( "1-Pentafluoroethylethanol" OR "2-Butanol, 3,3,4,4,4-pentafluoro-" OR "3,3,4,4,4-Pentafluorobutan-2-ol" OR "374-40-3" OR "EINECS 206-776-9" OR "pentafluoroethyl methyl carbinol" OR "374-40-3" OR "1-Pentafluoroethylethanol" )

tiab:( "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene, 1,1,1,2,2,3,3-heptafluoro-3-((1,2,2-trifluoroethenyl)oxy)propane and 1,1,2,2-tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene, 1,1,1,2,2,3,3-heptafluoro-3-((trifluoroethenyl)oxy)propane and tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propane and 1,1,2,2-tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and tetrafluoroethene" OR "74499-71-1" OR "Ethene, hexafluoropropene, 1-((trifluoroethenyl)oxy)heptafluoropropane, tetrafluoroethene polymer" OR "POLYFLGSID\_880976" OR "74499-71-1" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with ethene, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and tetrafluoroethene" )

tiab:( "1-Propene, polymer with 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and tetrafluoroethene" OR "63391-86-6" OR "POLYFLGSID\_880536" OR "63391-86-6" OR "1-Propene, polymer with 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and tetrafluoroethene" )

tiab:( "1-Propenylperfluoropropane" OR "2-Hexene, 4,4,5,5,6,6,6-heptafluoro-" OR "355-95-3" OR "4,4,5,5,6,6,6-Heptafluoro-2-hexene" OR "4,4,5,5,6,6,6-Heptafluorohex-2-ene" OR "355-95-3" OR "1-Propenylperfluoropropane" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt, ion(1-) (1:1)" OR "1379454-92-8" OR "1379454-92-8" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt, ion(1-) (1:1)" )

tiab:( "1-Dodecanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-tricosafluoro-" OR "1,1-Dihydroperfluorododecyl alcohol" OR "11:1 Fluorotelomer alcohol" OR "11:1 FTOH" OR "1H,1H-Perfluoro-1-dodecanol" OR "1H,1H-Perfluorododecanol" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-Tricosafluoro-1-dodecanol" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-Tricosafluorododecan-1-ol" OR "423-65-4" OR "Fluorotelomer alcohol 11:1" OR "FTOH 11:1" OR "423-65-4" OR "11:1 Fluorotelomer alcohol" )

tiab:( "1-Decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-" OR "1H,1H,2H-Perfluoro-1-decene" OR "21652-58-4" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodec-1-ene" OR "21652-58-4" OR "1H,1H,2H-Perfluoro-1-decene" )

tiab:( "EC 430-710-1" OR "1,1,2,2,3,3,4-Heptafluorocyclopentane" OR "15290-77-4" OR "17325-98-3" OR "1H,1H,2H-Perfluorocyclopentane" OR "Cyclopentane, 1,1,2,2,3,3,4-heptafluoro-" OR "15290-77-4" OR "1H,1H,2H-Perfluorocyclopentane" )

tiab:( "1-Pentanol, 2,2,3,3,4,4,5,5-octafluoro-" OR "1,1,5-Trihydrooctafluoropentan-1-ol" OR "1,1,5-Trihydrooctafluoropentyl alcohol" OR "1H,1H,5H-Octafluoro-1-pentanol" OR "1H,1H,5H-Perfluoropentanol" OR "2,2,3,3,4,4,5,5-Octafluoro-1-pentanol" OR "2,2,3,3,4,4,5,5-Octafluoropentan-1-ol" OR "2,2,3,3,4,4,5,5-Octafluoropentanol" OR "2,2,3,3,4,4,5,5-Octafluoropentyl alcohol" OR "355-80-6" OR "4-01-00-01648" OR "855832-03-0" OR "alpha,alpha,omega-Trihydroperfluoropentanol" OR "BRN 1773494" OR "NSC 114" OR "UNII-D05K8EJX15" OR "355-80-6" OR "1H,1H,5H-Perfluoropentanol" )

tiab:( "1H,1H,6H,6H-Perfluorohexane-1,6-diol diacrylate" OR "2-Propenoic acid, 2,2,3,3,4,4,5,5-octafluoro-1,6-hexanediyl ester" OR "2,2,3,3,4,4,5,5-Octafluorohexane-1,6-diyl diprop-2-enoate" OR "2264-01-9" OR "642474-63-3" OR "2264-01-9" OR "1H,1H,6H,6H-Perfluorohexane-1,6-diol diacrylate" )

tiab:( "129301-42-4" OR "1H,1H,8H,8H-Octafluoro-3,6-Dioxaoctane-1,8-Diol" OR "1H,1H,8H,8H-Perfluoro-3,6-dioxaoctane-1,8-diol" OR "2,2'-[(1,1,2,2-Tetrafluoroethane-1,2-diyl)bis(oxy)]bis(2,2-difluoroethan-1-ol)" OR "Ethanol, 2,2'-[(1,1,2,2-tetrafluoro-1,2-ethanediyl)bis(oxy)]bis[2,2-difluoro-" OR "129301-42-4" OR "1H,1H,8H,8H-Perfluoro-3,6-dioxaoctane-1,8-diol" )

tiab:( "1H,1H,9H-Perfluorononyl acrylate" OR "2-Propenoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-hexadecafluorononyl ester" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-Hexadecafluorononyl acrylate" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-Hexadecafluorononyl prop-2-enoate" OR "4180-26-1" OR "848665-04-3" OR "EINECS 224-053-6" OR "4180-26-1" OR "1H,1H,9H-Perfluorononyl acrylate" )

tiab:( "(Perfluoroheptyl)ethyl acrylate" OR "152210-09-8" OR "1H,1H-Perfluorooctyl acrylate" OR "2-Propenoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Pentadecafluorooctyl acrylate" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Pentadecafluorooctyl prop-2-enoate" OR "307-98-2" OR "EINECS 206-212-1" OR "307-98-2" OR "1H,1H-Perfluorooctyl acrylate" )

tiab:( "1-Pentanamine, 2,2,3,3,4,4,5,5,5-nonafluoro-" OR "1H,1H-Perfluoropentylamine" OR "2,2,3,3,4,4,5,5,5-Nonafluoro-1-pentanamine" OR "2,2,3,3,4,4,5,5,5-nonafluoropentan-1-amine" OR "355-27-1" OR "355-27-1" OR "1H,1H-Perfluoropentylamine" )

tiab:( "1005-73-8" OR "1H,2H-Hexafluorocyclopentene" OR "3,3,4,4,5,5-Hexafluorocyclopent-1-ene" OR "Cyclopentene, 3,3,4,4,5,5-hexafluoro-" OR "1005-73-8" OR "1H,2H-Hexafluorocyclopentene" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, 2,2,2-trifluoroethyl ester" OR "2,2,2-Trifluoroethyl nonafluorobutane-1-sulfonate" OR "2,2,2-Trifluoroethyl Nonafluorobutanesulfonate" OR "2,2,2-Trifluoroethyl perfluorobutanesulfonate" OR "2,2,2-trifluoroethylnonaflate" OR "79963-95-4" OR "79963-95-4" OR "2,2,2-Trifluoroethyl perfluorobutanesulfonate" )

tiab:( "13695-31-3" OR "152272-38-3" OR "152751-58-1" OR "1H,1H-Perfluorobutyl methacrylate" OR "2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,4-heptafluorobutyl ester" OR "2,2,3,3,4,4,4-Heptafluorobutyl 2-methylprop-2-enoate" OR "2,2,3,3,4,4,4-Heptafluorobutyl methacrylate" OR "EINECS 237-217-7" OR "Heptafluorobutyl methacrylate" OR "13695-31-3" OR "2,2,3,3,4,4,4-Heptafluorobutyl methacrylate" )

tiab:( "2,2-Difluoroethyl triflate" OR "2,2-difluoroethyl trifluoromethanesulfonate" OR "74427-22-8" OR "Methanesulfonic acid, 1,1,1-trifluoro-, 2,2-difluoroethyl ester" OR "74427-22-8" OR "2,2-Difluoroethyl triflate" )

tiab:( "(3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl)phosphonic acid" OR "2-(Perfluorohexyl)ethylphosphonic acid" OR "252237-40-4" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctylphosphonic acid" OR "Cheminox FHP 2OH" OR "Perfluorohexyl ethylphosphonic acid" OR "Phosphonic acid, (3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-" OR "Phosphonic acid, p-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-" OR "UNII-4H915F99WT" OR "252237-40-4" OR "2-(Perfluorohexyl)ethylphosphonic acid" )

tiab:( "1-Decanethiol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-" OR "2-(Perfluorooctyl)ethanthiol" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluoro-1-decanethiol" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecane-1-thiol" OR "34143-74-3" OR "852610-22-1" OR "34143-74-3" OR "2-(Perfluorooctyl)ethanthiol" )

tiab:( "2-(Trifluoromethoxy)ethyl trifluoromethanesulfonate" OR "329710-76-1" OR "Methanesulfonic acid, 1,1,1-trifluoro-, 2-(trifluoromethoxy)ethyl ester" OR "Trifluoromethanesulfonic acid 2-(trifluoromethoxy)ethyl ester" OR "329710-76-1" OR "2-(Trifluoromethoxy)ethyl trifluoromethanesulfonate" )

tiab:( "1,1,1,3,3,3-Hexafluoropropan-2-amine" OR "1619-92-7" OR "2-Amino-2H-perfluoropropane" OR "2-Propanamine, 1,1,1,3,3,3-hexafluoro-" OR "hexafluoroisopropylamine" OR "1619-92-7" OR "2-Amino-2H-perfluoropropane" )

tiab:( "2-Amino-1,1,1,3,3,3-hexafluoro-2-propanol" OR "2-Amino-1,1,1,3,3,3-hexafluoropropan-2-ol" OR "2-Aminohexafluoropropan-2-ol" OR "2-Propanol, 2-amino-1,1,1,3,3,3-hexafluoro-" OR "31253-34-6" OR "31253-34-6" OR "2-Aminohexafluoropropan-2-ol" )

tiab:( "1-Chlor-1,2,2,2-tetrafluorethan" OR "1-Chloro-1,2,2,2-tetrafluoroethane" OR "1-cloro-1,2,2,2-tetrafluoroetano" OR "1,1,1,2-Tetrafluoro-2-chloroethane" OR "1,1,1,2-Tetrafluorochloroethane" OR "2-CHLOR-1,1,1,2-TETRAFLUOR-AETHAN" OR "2-Chloro-1,1,1,2-tetrafluoroethane" OR "2837-89-0" OR "CFC 124" OR "EINECS 220-629-6" OR "Etano, 2-cloro-1 ,1,1,2-tetrafluoro -" OR "Ethane, 2-chloro-1,1,1,2-tetrafluoro-" OR "F 124" OR "F 124 (halocarbon)" OR "FC 124" OR "Freon 124" OR "Fron 124" OR "HCFC 124" OR "Khladon 124" OR "R 124" OR "UN 1021" OR "UNII-N00845EG42" OR "2837-89-0" OR "2-Chloro-1,1,1,2-tetrafluoroethane" )

tiab:( "2-Propenoic acid, 2-methyl-, methyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl-2-propenoate" OR "356780-95-5" OR "88248-34-4" OR "POLYFLGSID\_881015" OR "88248-34-4" OR "2-Propenoic acid, 2-methyl-, methyl ester, polymer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl-2-propenoate" )

tiab:( "1-Pentene, 3,4,4,5,5,5-hexafluoro-3-(trifluoromethyl)-" OR "2-Vinylperfluorobutane" OR "239795-57-4" OR "3,4,4,5,5,5-Hexafluoro-3-(trifluoromethyl)-1-pentene" OR "3,4,4,5,5,5-Hexafluoro-3-(trifluoromethyl)pent-1-ene" OR "239795-57-4" OR "2-Vinylperfluorobutane" )

tiab:( "2H,2H,3H,3H-Perfluorooctanoic acid" OR "4,4,5,5,6,6,7,7,8,8,8-Undecafluorooctanoic acid" OR "5:3 acid" OR "5:3 Fluorotelomer carboxylic acid" OR "5:3 FTCA" OR "5:3 PFOA" OR "5:3 Polyfluorinated acid" OR "914637-49-3" OR "Octanoic acid, 4,4,5,5,6,6,7,7,8,8,8-undecafluoro-" OR "914637-49-3" OR "2H,2H,3H,3H-Perfluorooctanoic acid" )

tiab:( "(Perfluorobutyl)ethene" OR "1-Hexene, 3,3,4,4,5,5,6,6,6-nonafluoro-" OR "19430-93-4" OR "1H,1H,2H-Perfluoro-1-hexene" OR "3,3,4,4,5,5,6,6,6-Nonafluorohex-1-ene" OR "3,3,4,4,5,5,6,6,6-Nonafluorohexene" OR "BRN 1819716" OR "EINECS 243-053-7" OR "Perfluorobutylethylene" OR "19430-93-4" OR "3,3,4,4,5,5,6,6,6-Nonafluorohexene" )

tiab:( "1763-28-6" OR "2-Butenoic acid, 4,4,4-trifluoro-3-(trifluoromethyl)-" OR "2-Butenoic acid, 4,4,4-trifluoro-3-trifluoromethyl-" OR "3,3-Bis(trifluoromethyl)-2-propenoic acid" OR "4,4,4-Trifluoro-3-(trifluoromethyl)but-2-enoic acid" OR "4,4,4-Trifluoro-3-(trifluoromethyl)crotonic acid" OR "4,4,4-Trifluoro-3-trifluoromethyl-2-butenoic acid" OR "BRN 1912186" OR "EINECS 217-180-3" OR "1763-28-6" OR "3,3-Bis(trifluoromethyl)-2-propenoic acid" )

tiab:( "1,2-Heptanediol, 4,4,5,5,6,6,7,7,7-nonafluoro-" OR "125070-38-4" OR "3-(Perfluoro-2-butyl)propane-1,2-diol" OR "4,4,5,5,6,6,7,7,7-Nonafluoro-1,2-heptanediol" OR "4,4,5,5,6,6,7,7,7-Nonafluoroheptane-1,2-diol" OR "125070-38-4" OR "3-(Perfluoro-2-butyl)propane-1,2-diol" )

tiab:( "(2,2,3,3,4,4,5,5,6,6,7,7,7-Tridecafluoroheptyl)oxirane" OR "2-(2,2,3,3,4,4,5,5,6,6,7,7,7-Tridecafluoroheptyl)oxirane" OR "3-(Perfluorohexyl)-1,2-epoxypropane" OR "3-Perfluorohexyl-1,2-epoxypropane" OR "38565-52-5" OR "EINECS 254-004-4" OR "Oxirane, (2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptyl)-" OR "Oxirane, 2-(2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptyl)-" OR "UNII-23YV4KT18O" OR "38565-52-5" OR "3-(Perfluorohexyl)-1,2-epoxypropane" )

tiab:( "2-Pentenoic acid, 4,5,5,5-tetrafluoro-4-(trifluoromethyl)-" OR "243139-64-2" OR "3-(Perfluoroisopropyl)-2-propenoic acid" OR "4,5,5,5-tetrafluoro-4-(trifluoromethyl)-2-pentenoic acid" OR "4,5,5,5-Tetrafluoro-4-(trifluoromethyl)pent-2-enoic acid" OR "243139-64-2" OR "3-(Perfluoroisopropyl)-2-propenoic acid" )

tiab:( "1-Hexanol, 4,4,5,5,6,6,6-heptafluoro-" OR "3-(Perfluoropropyl)propanol" OR "4,4,5,5,6,6,6-heptafluorohexan-1-ol" OR "679-02-7" OR "heptafluoro-1-hexanol" OR "679-02-7" OR "3-(Perfluoropropyl)propanol" )

tiab:( "1,1,1,2,2,3,4,5,5,5-Decafluoro-3-methoxy-4-(trifluoromethyl)pentane" OR "132182-92-4" OR "3-Methoxyperfluoro(2-methylpentane)" OR "Pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-(trifluoromethyl)-" OR "132182-92-4" OR "3-Methoxyperfluoro(2-methylpentane)" )

tiab:( "2H,2H,3H,3H-Perfluorodecanoic acid" OR "3-perfluoroheptyl propanoic acid" OR "3-Perfluoroheptylpropanoic acid" OR "4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Pentadecafluorodecanoic acid" OR "7:3 Fluorotelomer carboxylic acid" OR "7:3 FTCA" OR "812-70-4" OR "Decanoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-pentadecafluoro-" OR "FHpPA" OR "812-70-4" OR "3-Perfluoroheptylpropanoic acid" )

tiab:( "1169706-83-5" OR "3:3 Acid\_ion" OR "3:3 Fluorotelomer carboxylate, ion(1-)" OR "4,4,5,5,6,6,6-Heptafluorohexanoate" OR "Hexanoic acid, 4,4,5,5,6,6,6-heptafluoro-, ion(1-)" OR "1169706-83-5" OR "3:3 Fluorotelomer carboxylate, ion(1-)" )

tiab:( "3:3 Acid" OR "3:3 Fluorotelomer carboxylic acid" OR "356-02-5" OR "4,4,5,5,6,6,6-Heptafluorohexanoic acid" OR "Hexanoic acid, 4,4,5,5,6,6,6-heptafluoro-" OR "356-02-5" OR "3:3 Fluorotelomer carboxylic acid" )

tiab:( "1,1,1,5,5,6,6,6-Octafluoro-2,4-hexanedione" OR "1,1,1,5,5,6,6,6-Octafluorohexane-2,4-dione" OR "2,4-Hexanedione, 1,1,1,5,5,6,6,6-octafluoro-" OR "20825-07-4" OR "3H,3H-Perfluoro-2,4-hexanedione" OR "20825-07-4" OR "3H,3H-Perfluoro-2,4-hexanedione" )

tiab:( "1,1,1,3,5,5,5-Heptafluoropentane-2,2,4,4-tetrol" OR "2,2,4,4-Pentanetetrol, 1,1,1,3,5,5,5-heptafluoro-" OR "3H-heptafluoro-2,2,4,4-tetrahydroxypentane" OR "3H-Perfluoro-2,2,4,4-tetrahydroxypentane" OR "77953-71-0" OR "77953-71-0" OR "3H-Perfluoro-2,2,4,4-tetrahydroxypentane" )

tiab:( "1,1,1,5,5,5-Hexafluoro-4-hydroxy-3-penten-2-one" OR "1,1,1,5,5,5-Hexafluoro-4-hydroxypent-3-en-2-one" OR "1694-30-0" OR "3-Penten-2-one, 1,1,1,5,5,5-hexafluoro-4-hydroxy-" OR "3H-Perfluoro-4-hydroxy-3-penten-2-one" OR "1694-30-0" OR "3H-Perfluoro-4-hydroxy-3-penten-2-one" )

tiab:( "1-Hexanol, 3,3,4,4,5,5,6,6,6-nonafluoro-" OR "1,1,2,2-Tetrahydroperfluoro-1-hexanol" OR "1,1,2,2-Tetrahydroperfluorohexan-1-ol" OR "1,1,2,2-Tetrahydroperfluorohexyl alcohol" OR "1H,1H,2H,2H-Nonafluoro-1-hexanol" OR "1H,1H,2H,2H-Nonafluoro-n-hexanol" OR "1H,1H,2H,2H-Nonafluorohexanol" OR "1H,1H,2H,2H-Perfluorohexan-1-ol" OR "1H,1H,2H,2H-Perfluorohexanol" OR "2-(Perfluorobutyl)ethanol" OR "2-(Perfluorobutyl)ethyl alcohol" OR "2043-47-2" OR "3,3,4,4,5,5,6,6,6-Nonafluorhexanol" OR "3,3,4,4,5,5,6,6,6-Nonafluoro-1-hexanol" OR "3,3,4,4,5,5,6,6,6-Nonafluorohexan-1-ol" OR "3,3,4,4,5,5,6,6,6-Nonafluorohexanol" OR "4:2 Fluorotelomer alcohol" OR "4:2 FTOH" OR "EINECS 218-050-9" OR "Fluorotelomer alcohol 4:2" OR "FTOH 4:2" OR "Perfluorobutylethanol" OR "TEOH 4" OR "2043-47-2" OR "4:2 Fluorotelomer alcohol" )

tiab:( "1-Hexanesulfonic acid, 3,3,4,4,5,5,6,6,6-nonafluoro-" OR "3,3,4,4,5,5,6,6,6-Nonafluoro-1-hexanesulfonic acid" OR "3,3,4,4,5,5,6,6,6-Nonafluorohexane-1-sulfonic acid" OR "4:2 Fluorotelomer sulfonic acid" OR "4:2 FTS" OR "757124-72-4" OR "Fluorotelomer sulfonic acid 4:2" OR "FTS 4:2" OR "757124-72-4" OR "4:2 Fluorotelomer sulfonic acid" )

tiab:( "1-Octanol, 5,5,6,6,7,7,8,8,8-nonafluoro-" OR "3792-02-7" OR "4:4 Fluorotelomer alcohol" OR "4:4 FTOH" OR "5,5,6,6,7,7,8,8,8-Nonafluoro-1-octanol" OR "5,5,6,6,7,7,8,8,8-Nonafluorooctan-1-ol" OR "5,5,6,6,7,7,8,8,8-Nonafluorooctanol" OR "5,5,6,6,7,7,8,8,8-Nonofluorooctan-1-ol" OR "3792-02-7" OR "4:4 Fluorotelomer alcohol" )

tiab:( "2,2,3,3,4,4-Hexafluorobutanoic acid" OR "2,2,3,3,4,4-Hexafluorobutyric acid" OR "4H-Perfluorobutanoic acid" OR "679-12-9" OR "Butanoic acid, 2,2,3,3,4,4-hexafluoro-" OR "679-12-9" OR "4H-Perfluorobutanoic acid" )

tiab:( "1017281-31-0" OR "5,6,7,8-13C4-Perfluorooctanoic acid" OR "5,6,7,8-13C4-PFOA" OR "Octanoic-5,6,7,8-~13~C\_4\_ acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-" OR "Octanoic-5,6,7,8-13C4 acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-" OR "Pentadecafluoro(5,6,7,8-~13~C\_4\_)octanoic acid" OR "Pentadecafluoro(5,6,7,8-13C4)octanoic acid" OR "1017281-31-0" OR "5,6,7,8-13C4-Perfluorooctanoic acid" )

tiab:( "2,2,3,3,4,4,5,5-Octafluoropentanoyl fluoride" OR "5H-Octafluoropentanoyl fluoride" OR "813-03-6" OR "Pentanoyl fluoride, 2,2,3,3,4,4,5,5-octafluoro-" OR "813-03-6" OR "5H-Octafluoropentanoyl fluoride" )

tiab:( "2,2,3,3,4,4,5,5-Octafluoropentanal" OR "2648-47-7" OR "5H-Octafluoropentanal" OR "5H-Perfluoropentanal" OR "Pentanal, 2,2,3,3,4,4,5,5-octafluoro-" OR "2648-47-7" OR "5H-Perfluoropentanal" )

tiab:( "1-Heptanol, 2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-" OR "1,1-Dihydroperfluoroheptanol" OR "1H,1H-Perfluoro-1-heptanol" OR "1H,1H-Perfluoroheptanol" OR "1H,1H-Tridecafluoro-1-heptanol" OR "1H,1H-Tridecafluoroheptanol" OR "2,2,3,3,4,4,5,5,6,6,7,7,7-Tridecafluorheptan-1-ol" OR "2,2,3,3,4,4,5,5,6,6,7,7,7-Tridecafluoro-1-heptanol" OR "2,2,3,3,4,4,5,5,6,6,7,7,7-Tridecafluoroheptan-1-ol" OR "2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptane-1-ol" OR "375-82-6" OR "6:1 Fluorotelomer alcohol" OR "6:1 FTOH" OR "EC 206-796-8" OR "EINECS 206-796-8" OR "Fluorotelomer alcohol 6:1" OR "FTOH 6:1" OR "Perfluorohexylmethanol" OR ",-Dihydroperfluoroheptanol" OR "375-82-6" OR "6:1 Fluorotelomer alcohol" )

tiab:( "1-Octanol, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-" OR "1,1,2,2-Tetrahydroperfluoro-1-octanol" OR "1,1,2,2-Tetrahydroperfluorooctan-1-ol" OR "1,1,2,2-Tetrahydroperfluorooctanol" OR "1,1,2,2-Tetrahydrotridecafluorooctanol" OR "119937-79-0" OR "1H,1H,2H,2H-Perfluoro-1-octanol" OR "1H,1H,2H,2H-Perfluorooctan-1-ol" OR "1H,1H,2H,2H-Perfluorooctanol" OR "1H,1H,2H,2H-Tetrahydroperfluoro-1-octanol" OR "1H,1H,2H,2H-Tridecafluoro-1-octanol" OR "1H,1H,2H,2H-Tridecafluoro-n-octanol" OR "1H,1H,2H,2H-Tridecafluorooctanol" OR "2-(Perfluorohexyl)ethanol" OR "2-(Perfluorohexyl)ethyl alcohol" OR "2-(Tridecafluorohexyl)ethanol" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoroctan-1-ol" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctan-1-ol" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-ol" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctanol" OR "6:2 Fluorotelomer alcohol" OR "6:2 FTOH" OR "647-42-7" OR "Capstone 62AL" OR "Cheminox FA 6" OR "EINECS 211-477-1" OR "Fluorotelomer alcohol 6:2" OR "Fluowet EA 600" OR "Foralkyl EOH 6" OR "FtOH 6:2" OR "Perfluorohexylethanol" OR "TEOH 6" OR "UNII-G2R5YO5N3V" OR "647-42-7" OR "6:2 Fluorotelomer alcohol" )

tiab:( "1-Octanol, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-, methacrylate" OR "1,1,2,2-Tetrahydroperfluorooctyl methacrylate" OR "116426-23-4" OR "1202243-70-6" OR "1645304-87-5" OR "1877330-13-6" OR "1H,1H,2H,2H-Perfluorooctyl methacrylate" OR "1H,1H,2H,2H-Tridecafluoro-1-octyl methacrylate" OR "1H,1H,2H,2H-Tridecafluorooctyl methacrylate" OR "2-(Perfluorohexyl)ethyl methacrylate" OR "2-(Tridecafluorohexyl)ethyl methacrylate" OR "2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester" OR "2144-53-8" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoroctylmethacrylat" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctan-1-yl 2-methyl-2-propenoate" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctan-1-yl methacrylate" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctanyl methacrylate" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl 2-methyl-2-propenoate" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl 2-methylprop-2-enoate" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl methacrylate" OR "6:2 Fluorotelomer methacrylate" OR "6:2 FTMAC" OR "Actyflon G 06B" OR "C 6FMA" OR "C 6SFMA" OR "C" OR "2144-53-8" OR "6:2 Fluorotelomer methacrylate" )

tiab:( "1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-" OR "1,1,2,2-Tetrahydroperflorooctane sulfonate" OR "1H,1H,2H,2H-Perfluorooctanesulfonic acid" OR "2-(Perfluorohexyl)ethane-1-sulfonic acid" OR "2-(Perfluorohexyl)ethanesulfonic acid" OR "27619-97-2" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic acid" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoroctansulfonsaure" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctane-1-sulfonic acid" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctanesulfonic acid" OR "3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctanesulphonic acid" OR "6:2 Fluorotelomer sulfonic acid" OR "6:2 FTS" OR "Acide 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctanesulfonique" OR "EINECS 248-580-6" OR "Fluorotelomer sulfonic acid 6:2" OR "FtS 6:2" OR "Halogenated aliphatic acid" OR "THPFOS" OR "27619-97-2" OR "6:2 Fluorotelomer sulfonic acid" )

tiab:( "1-Hexene, 1,1,2,3,3,4,4,5,5,6,6-undecafluoro-" OR "1,1,2,3,3,4,4,5,5,6,6-Undecafluoro-1-hexene" OR "1,1,2,3,3,4,4,5,5,6,6-Undecafluorohex-1-ene" OR "1767-94-8" OR "6H-Perfluorohex-1-ene" OR "1767-94-8" OR "6H-Perfluorohex-1-ene" )

tiab:( "1-Decanol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-pentadecafluoro-" OR "1H,1H,2H,2H,3H,3H-Perfluorodecan-1-ol" OR "25600-66-2" OR "3-(Perfluoroheptyl)propan-1-ol" OR "4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Pentadecafluorodecan-1-ol" OR "7:3 Fluorotelomer alcohol" OR "25600-66-2" OR "7:3 Fluorotelomer alcohol" )

tiab:( "(Perfluorooctyl)ethyl acrylate" OR "1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluorodecyl acrylate" OR "1,1,2,2-Tetrahydroperfluorodecyl acrylate" OR "1035533-39-1" OR "1040032-81-2" OR "120719-67-7" OR "141256-41-9" OR "1H,1H,2H,2H-Heptadecafluorodecyl acrylate" OR "1H,1H,2H,2H-Perfluorodecyl acrylate" OR "1H,1H,2H,2H-Perfluorodecyl propenoate; 2-(Perfluorooctyl)ethyl acrylate" OR "2-(Perfluorooctyl)ethyl acrylate" OR "2-Heptadecafluorooctylethyl acrylate" OR "2-Propenoic acid 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester" OR "2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester" OR "27905-45-9" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluordecylacrylat" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl acrylate" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecyl prop-2- enoate" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecyl prop-2-enoate" OR "470477-93-1" OR "8:2 Fluorotelomer acrylate" OR "8:2 FTAc" OR "acrilato de 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecilo" OR "Acrylate de 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10" OR "27905-45-9" OR "8:2 Fluorotelomer acrylate" )

tiab:( "(Perfluorooctyl)ethanol" OR "1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8, 9,9,10,10,10-heptadecafluoro-" OR "1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-" OR "1,1,2,2-Tetrahydroheptadecafluorodecanol" OR "1,1,2,2-Tetrahydroperfluoro-1-decanol" OR "1,1,2,2-Tetrahydroperfluorodecan-1-ol" OR "1,1,2,2-Tetrahydroperfluorodecanol" OR "1,1,2,2-Tetrahydroperfluorodecyl alcohol" OR "1H,1H,2H,2H-Heptadecafluoro-1-decanol" OR "1H,1H,2H,2H-Perfluorodecan-1-ol" OR "1H,1H,2H,2H-Perfluorodecanol" OR "1H,1H,2H,2H-Tetrahydroperfluoro-1-decanol" OR "2-(Heptadecafluorooctyl)ethanol" OR "2-(Perfluorooctyl)ethanol" OR "2-(Perfluorooctyl)ethyl alcohol" OR "2-Perfluorooctyl ethanol (8:2)" OR "2-perfluorooctylethanol" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluoro-1-decanol" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecan-1-ol" OR "678-39-7" OR "8-2 Telomer B alcohol" OR "8:2 Fluorotelomer alcohol" OR "8:2 FTOH" OR "A 1820" OR "beta-(Heptadecafluorooctyl)ethanol" OR "C 1820" OR "Daikin A 1820" OR "EINECS 211-648-0" OR "Fluorotelomer alcohol 8:2" OR "Fluowet EA 800" OR "FtOH 8:2" OR "PFA 8" OR "UNII-UM7" OR "678-39-7" OR "8:2 Fluorotelomer alcohol" )

tiab:( "1-Decanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-" OR "1H,1H,2H,2H-Perfluorodecanesulfonic acid" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluordecansulfonsaure" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluoro-1-decanesulfonic acid" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecane-1-sulfonic acid" OR "3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecanesulphonic acid" OR "39108-34-4" OR "8:2 Fluorotelomer sulfonic acid" OR "8:2 FTS" OR "acide 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecanesulfoniqu" OR "acido 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecanosulfonico" OR "EINECS 254-295-8" OR "Fluorotelomer sulfonic acid 8:2" OR "FtS 8:2" OR "39108-34-4" OR "8:2 Fluorotelomer sulfonic acid" )

tiab:( "865-79-2" OR "9-Chloro-2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-hexadecafluorononanoic acid" OR "9-Chloro-perfluorononanoic acid" OR "Cl-perfluorononanoic acid" OR "Cl-PFNA" OR "Nonanoic acid, 9-chloro-2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-hexadecafluoro-" OR "-Chloroperfluoropelargonic acid" OR "865-79-2" OR "9-Chloro-perfluorononanoic acid" )

tiab:( "1-Propene, 3-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethoxy]-" OR "1,1,1,2,3,3,3-heptafluoro-2-prop-2-enoxypropane" OR "15242-17-8" OR "3-[(1,1,1,2,3,3,3-Heptafluoropropan-2-yl)oxy]prop-1-ene" OR "Allyl heptafluoroisopropyl ether" OR "Allyl perfluoroisopropyl ether" OR "15242-17-8" OR "Allyl perfluoroisopropyl ether" )

tiab:( "2,3,3,3-Tetrafluoro-2- (1,1,2,2,3,3,3-heptafluoropropoxy)- propanoic acid (PFPrOPrA)" OR "2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid, ammonium salt (1:1)" OR "62037-80-3" OR "AmGenX" OR "Ammonium 2-(perfluoropropoxy)perfluoropropionate" OR "Ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate" OR "Ammonium perfluoro-2-methyl-3-oxahexanoate" OR "Ammonium perfluoro(2-methyl-3-oxahexanoic) acid" OR "EC 700-242-3" OR "GenX" OR "GenX-H3N" OR "GenX-NH4" OR "HFPO-DA" OR "Perfluoro-2-propoxypropanoic acid" OR "Perfluoro-2-propoxypropanoic acid (PFPrOPrA)" OR "Perfluoropropoxypropanoic acid (aka GenX)" OR "PFPrOPrA" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-, ammonium salt" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-, ammonium salt (1:1)" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, ammonium salt" OR "Undecafluoro-2-methyl-3-oxahexanoic acid" OR "62037-80-3" OR "Ammonium perfluoro-2-methyl-3-oxahexanoate" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, ammonium salt" OR "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, ammonium salt (1:1)" OR "68259-10-9" OR "Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate" OR "Ammonium nonafluorobutane-1-sulfonate" OR "Ammonium perfluorobutanesulfonate" OR "AmPFBS" OR "APFBS" OR "EINECS 269-513-7" OR "Nonafluoro-1-butanesulfonic acid, ammonium salt" OR "PFBS-H3N" OR "PFBS-NH4" OR "68259-10-9" OR "Ammonium perfluorobutanesulfonate" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt (1:1)" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octane sulfonic acid ammonium salt" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octanesulfonic acid, ammonium salt" OR "175895-38-2" OR "29081-56-9" OR "76560-29-7" OR "ammonium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate" OR "ammonium heptadecafluorooctanesulfonate" OR "ammonium perfluorooctane sulfonate" OR "ammonium perfluorooctane sulphonate" OR "Ammonium perfluorooctanesulfonate" OR "AmPFOS" OR "APFOS" OR "EF 104" OR "Eftop EF 104" OR "EINECS 249-415-0" OR "FC 93" OR "Fluorad FC 93" OR "Heptadecafluorooctane-1-sulfonic acid--ammonia (1/1)" OR "Perfluorooctanesulfonic acid, ammonium salt" OR "PFOS-H3N" OR "PFOS-NH4" OR "29081-56-9" OR "Ammonium perfluorooctanesulfonate" )

tiab:( "3825-26-1" OR "77751-76-9" OR "95328-99-7" OR "Ammonium pentadecafluorooctanoate" OR "Ammonium perfluorocaprylate" OR "Ammonium perfluorooctanoate" OR "Ammonium salt of perfluorooctanoate" OR "ammoniumpentadeca- fluorooctanoate" OR "Ammoniumpentadecafluoroctanoat" OR "AmPFOA" OR "APFOA" OR "CXR 1002" OR "CXR-1002" OR "EINECS 223-320-4" OR "Fluorad FC 143" OR "NSC 35120" OR "OCTANOATE, PENTADECAFLUORO-, AMMONIUM" OR "Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, ammonium salt" OR "Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, ammonium salt (1:1)" OR "Octanoic acid, pentadecafluoro-, ammonium salt" OR "Pentadecafluoro-1-octanoic acid, ammonium salt" OR "Pentadecafluorooctanoate d'ammonium" OR "pentadecafluorooctanoato de amonio" OR "Pentadecafluorooctanoic acid ammonium salt" OR "Perfluoroammonium octanoate" OR "Perfluorooctanoic acid ammonium salt" OR "Perfluorooctanoic acid, ammonium salt" OR "PFOA-H3N" OR "PFOA-NH4" OR "PFOA, ammonium salt" OR "PFOAA" OR "Unidyne DS 101" OR "3825-26-1" OR "Ammonium perfluorooctanoate" )

tiab:( "1-Propanamine, 2,2,3,3,3-pentafluoro-N-(2,2,3,3,3-pentafluoropropyl)-" OR "2,2,3,3,3-pentafluoro-N-(2,2,3,3,3-pentafluoropropyl)propan-1-amine" OR "883498-76-8" OR "Bis(1H,1H-perfluoropropyl)amine" OR "Bis(2,2,3,3,3-pentafluoropropyl)amine" OR "883498-76-8" OR "Bis(1H,1H-perfluoropropyl)amine" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)" OR "70225-18-2" OR "Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate" OR "EINECS 274-465-5" OR "Nonafluoro-1-butanesulfonic acid, compd. with diethanolamine" OR "Nonafluorobutane-1-sulfonic acid--2,2'-azanediyldi(ethan-1-ol) (1/1)" OR "70225-18-2" OR "Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate" )

tiab:( "3-(Difluoromethoxy)-1,1,1,2,2-pentafluoropropane" OR "56860-81-2" OR "Difluoromethyl 1H,1H-perfluoropropyl" OR "Difluoromethyl 2,2,3,3,3-pentafluoropropyl ether" OR "Propane, 3-(difluoromethoxy)-1,1,1,2,2-pentafluoro-" OR "56860-81-2" OR "Difluoromethyl 1H,1H-perfluoropropyl" )

tiab:( "1-Heptanol, 1H,1H,7H-dodecafluoro-" OR "1-Heptanol, 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-" OR "1,1,7-Trihydrododecafluoroheptan-1-ol" OR "1,1,7-Trihydrododecafluoroheptanol" OR "1,1,7-Trihydroperfluoroheptanol" OR "1,1,7-Trihydroperfluoroheptyl alcohol" OR "1H,1H,7H-Dodecafluoro-1-heptanol" OR "1H,1H,7H-Dodecafluoro-1-hydroxyheptane" OR "2,2,3,3,4,4,5,5,6,6,7,7-Dodecafluoro-1-heptanol" OR "2,2,3,3,4,4,5,5,6,6,7,7-Dodecafluoroheptan-1-ol" OR "335-99-9" OR "Dodecafluoroheptanol" OR "NSC 115" OR "335-99-9" OR "Dodecafluoroheptanol" )

tiab:( "1-(Ethoxy)nonafluorobutane" OR "1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane" OR "1337538-18-7" OR "163702-05-4" OR "Butane, 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluoro-" OR "Ethyl nonafluorobutyl ether" OR "Ethyl perfluorobutyl ether" OR "UNII-520BW6FQ5U" OR "163702-05-4" OR "Ethyl perfluorobutyl ether" )

tiab:( "(2,2-Difluoro-2-{1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]ethoxy}ethanol)" OR "147492-57-7" OR "1H,1H-Perfluoro-3,6,9-trioxadecan-1-ol" OR "2,2-Difluoro-2-{1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]ethoxy}ethan-1-ol" OR "Ethanol, 2,2-difluoro-2-[1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]ethoxy]-" OR "Fluorinated triethylene glycol monomethyl ether" OR "147492-57-7" OR "Fluorinated triethylene glycol monomethyl ether" )

tiab:( "1,1,1-Trifluoro-2-(2,2,2-trifluoroethoxy)ethane" OR "2-(2,2,2-Trifluoroethoxy)-1,1,1-trifluoroethane" OR "333-36-8" OR "4-01-00-01371" OR "Bis(2,2,2-trifluoroethyl)ether" OR "Bis(trifluoroethyl)ether" OR "BRN 1811927" OR "Ethane, 2,2'-oxybis[1,1,1-trifluoro-" OR "Flurothyl" OR "Flurotilo" OR "Flurotylum" OR "Hexafluorodiethyl ether" OR "Indoklon" OR "UNII-9Z467FG2YK" OR "333-36-8" OR "Flurothyl" )

tiab:( "(Perfluoropropyl)methanol" OR "1-Butanol, 2,2,3,3,4,4,4-heptafluoro" OR "1-Butanol, 2,2,3,3,4,4,4-heptafluoro-" OR "1,1-DIHYDROPERFLUORBUTANOL" OR "1,1-Dihydroperfluoro-1-butanol" OR "1,1-Dihydroperfluorobutanol" OR "1,1-Dihydroperfluorobutyl alcohol" OR "1,1-H,H-Heptafluorobutanol" OR "1H,1H-Heptafluoro-1-butanol" OR "1H,1H-Heptafluorobutanol" OR "1H,1H-Heptafluorobutanol-1" OR "2,2,3,3,4,4,4-Heptafluorbutan-1-ol" OR "2,2,3,3,4,4,4-Heptafluoro-1-butanol" OR "2,2,3,3,4,4,4-heptafluorobutan-1-ol" OR "2,2,3,3,4,4,4-heptafluorobutane-1-ol" OR "2,2,3,3,4,4,4-Heptafluorobutanol" OR "375-01-9" OR "4-01-00-01547" OR "alpha,alpha-Dihydroperfluorobutanol" OR "BRN 1761907" OR "Butanol, 2,2,3,3,4,4,4-heptafluoro-" OR "EINECS 206-782-1" OR "Heptafluoro-1,1-dihydrobutyl alcohol" OR "Heptafluorobutanol" OR "NSC 60528" OR ",-Dihydroperfluorobutanol" OR "375-01-9" OR "Heptafluorobutanol" )

tiab:( "1,1,1,2,2,3,3-Heptafluoro-4-iodobutane" OR "374-98-1" OR "Butane, 1,1,1,2,2,3,3-heptafluoro-4-iodo-" OR "EINECS 206-779-5" OR "Heptafluorobutyl iodide" OR "374-98-1" OR "Heptafluorobutyl iodide" )

tiab:( "2,2,3,3,4,4,4-Heptafluorobutanamide" OR "662-50-0" OR "BRN 1790527" OR "Butanamide, 2,2,3,3,4,4,4-heptafluoro-" OR "Butyramide, alpha,alpha,beta,beta,gamma,gamma,gamma-heptafluoro-" OR "EINECS 211-553-4" OR "Heptafluorobutyramide" OR "NSC 9451" OR "Perfluorobutyramide" OR "662-50-0" OR "Heptafluorobutyramide" )

tiab:( "356-24-1" OR "Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-" OR "Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-, methyl ester" OR "Butanoic acid, heptafluoro-, methyl ester" OR "EINECS 206-600-0" OR "Heptafluorobutyryl methyl ester" OR "Methyl heptafluorobutanoate" OR "Methyl heptafluorobutyrate" OR "356-24-1" OR "Heptafluorobutyryl methyl ester" )

tiab:( "1,5-Pentanediol, 2,2,3,3,4,4-hexafluoro-" OR "2,2,3,3,4,4-Hexafluoro-1,5-pentanediol" OR "2,2,3,3,4,4-Hexafluoropentane-1,5-diol" OR "2,2,3,3,4,4-Hexafluoropentanediol" OR "29713-13-1" OR "376-90-9" OR "EINECS 206-819-1" OR "Hexafluoroamylene glycol" OR "NSC 29196" OR "376-90-9" OR "Hexafluoroamylene glycol" )

tiab:( "678-77-3" OR "EINECS 211-651-7" OR "Hexafluoroglutaryl chloride" OR "Hexafluoropentanedioyl dichloride" OR "NSC 41888" OR "Pentanedioyl dichloride, 2,2,3,3,4,4-hexafluoro-" OR "Pentanedioyl dichloride, hexafluoro-" OR "Perfluoroglutaryl chloride" OR "678-77-3" OR "Hexafluoroglutaryl chloride" )

tiab:( "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,1,2,2,3,3-heptafluoro-3-((1,2,2-trifluoroethenyl)oxy)propane and 1,1,2,2-tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,1,2,2,3,3-heptafluoro-3-((trifluoroethenyl)oxy)propane and tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]propane and 1,1,2,2-tetrafluoroethene" OR "1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]propane and tetrafluoroethene" OR "148465-04-7" OR "63654-41-1" OR "Hexafluoropropene, 1-((trifluoroethenyl)oxy)heptafluoropropane, tetrafluoroethene polymer" OR "POLYFLGSID\_880532" OR "63654-41-1" OR "Hexafluoropropene, 1-((trifluoroethenyl)oxy)heptafluoropropane, tetrafluoroethene polymer" )

tiab:( "1:1 Azeotrope, fluorochlorinated hydrocarbon substitute solvent" OR "185045-68-5" OR "Butane, 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-, mixt. with (1E)-1,2-dichloroethene and 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane" OR "Butane, 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-, mixt. with (E)-1,2-dichloroethene and 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane" OR "Ethene, 1,2-dichloro-, (1E)-, mixt. contg." OR "Ethene, 1,2-dichloro-, (E)-, mixt. contg." OR "HFE 71 DE" OR "HFE-71 DE" OR "Methoxynonafluorobutane - trans-1,2-Dichloroethylene 1:1 azeotrope" OR "Methoxyperfluorobutane - trans-1,2-Dichloroethylene 1:1 azeotrope" OR "Nonafluorobutyl methyl ether - trans-1,2-Dichloroethylene 1:1 Azeotrope" OR "Nonafluorobutyl methyl ether - trans-1,2-Dichloroethylene mixture" OR "Nonafluoromethoxybutane - trans-1,2-Dichloroethylene 1:1 Azeotrope" OR "Novatec HFE 7100 mixt. with trans-1,2-dichloroethylene" OR "Propane, 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoro-, mixt. contg." OR "185045-68-5" OR "HFE 71 DE" )

tiab:( "1393361-46-0" OR "219484-64-7" OR "HFE 7100" OR "219484-64-7" OR "HFE 7100" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, lithium salt" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, lithium salt (1:1)" OR "29457-72-5" OR "314057-78-8" OR "EINECS 249-644-6" OR "Fluorad FC 94" OR "Lithium (perfluorooctane)sulfonate" OR "Lithium (perfluorooctyl)sulfonate" OR "Lithium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate" OR "Lithium heptadecafluoro-1-octanesulfonate" OR "Lithium heptadecafluorooctane-1-sulfonate" OR "Lithium perfluoro-1-octanesulfonate" OR "Lithium perfluorooctane sulfonate" OR "Lithium perfluorooctanesulfonate" OR "Lithium PFOS" OR "PC-075004" OR "Perfluorooctanesulfonic acid lithium salt" OR "PFOS-Li" OR "Super-Arinosu-Korori" OR "29457-72-5" OR "Lithium perfluorooctanesulfonate" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, magnesium salt" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, magnesium salt (2:1)" OR "91036-71-4" OR "bis[heptadecafluorooctanesulfonate] de magnesium" OR "bis[heptadecafluorooctanosulfonato] de magnesio" OR "EINECS 293-022-7" OR "Magnesium bis(heptadecafluoro-1-octanesulfonate)" OR "Magnesium bis(heptadecafluorooctane-1-sulfonate)" OR "Magnesium bis(heptadecafluorooctanesulphonate)" OR "magnesium bis[heptadecafluorooctanesulphonate]" OR "Magnesiumbis[heptadecafluorooctansulfonat]" OR "91036-71-4" OR "Magnesium bis(heptadecafluorooctanesulphonate)" )

tiab:( "132424-36-3" OR "Heptanoic acid, 4,4,5,5,6,6,7,7,7-nonafluoro-, methyl ester" OR "Methyl 2H,2H,3H,3H-perfluoroheptanoate" OR "Methyl 4,4,5,5,6,6,7,7,7-nonafluoroheptanoate" OR "132424-36-3" OR "Methyl 2H,2H,3H,3H-perfluoroheptanoate" )

tiab:( "1562378-36-2" OR "63863-43-4" OR "79948-24-6" OR "87365-90-0" OR "EINECS 264-518-0" OR "Methyl 2,2,3,3-tetrafluoro-3-({1,1,1,2,3,3-hexafluoro-3-[(trifluoroethenyl)oxy]propan-2-yl}oxy)propanoate" OR "Methyl perfluoro(3-(1-ethenyloxypropan-2-yloxy)propanoate)" OR "Propanoic acid, 3-(1-(difluoro((trifluoroethenyl)oxy)methyl)-1,2,2,2-tetrafluoroethoxy)-2,2,3,3-tetrafluoro-, methyl ester" OR "Propanoic acid, 3-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester" OR "Propionic acid, tetrafluoro-3-(trifluoro-1-(trifluoromethyl)-2-((trifluorovinyl)oxy)ethoxy)-, methyl ester" OR "63863-43-4" OR "Methyl perfluoro(3-(1-ethenyloxypropan-2-yloxy)propanoate)" )

tiab:( "2-Butanone, 3,3,4,4,4-pentafluoro-" OR "3,3,4,4,4-Pentafluorobutan-2-one" OR "374-41-4" OR "Methyl perfluoroethyl ketone" OR "Methylpentafluoroethyl ketone" OR "Pentafluoroethyl methyl ketone" OR "374-41-4" OR "Methyl perfluoroethyl ketone" )

tiab:( "2,2,3,3,4,4,5,5,6,6,6-Undecafluoro- hexanoic acid methyl ester" OR "424-18-0" OR "Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-, methyl ester" OR "Methyl perfluorohexanoate" OR "Methyl undecafluorohexanoate" OR "424-18-0" OR "Methyl perfluorohexanoate" )

tiab:( "Mixture of PFOS and PFOA" OR "NOCAS\_872963" OR "NOCAS\_872963" OR "Mixture of PFOS and PFOA" )

tiab:( "1-Decanaminium, N-decyl-N,N-dimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1)" OR "1-Decanaminium, N-decyl-N,N-dimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid (1:1)" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ion(1-), N-decyl-N,N-dimethyl-1-decanaminium" OR "251099-16-8" OR "didecyldimethylammonium perfluorooctane sulfonate" OR "N-Decyl-N,N-dimethyl-1-decanaminium perfluorooctanesulfonate" OR "N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate" OR "N-Decyl-N,N-dimethyldecan-1-aminium heptadecafluorooctane-1-sulfonate" OR "Perfluorooctane sulfonate de didecyldimethylammonium" OR "POLYFLGSID\_882964" OR "251099-16-8" OR "N-Decyl-N,N-dimethyl-1-decanaminium perfluorooctanesulfonate" )

tiab:( "1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-" OR "1691-99-2" OR "2-[N-Ethyl-N-(perfluorooctylsulfonyl)amino]ethanol" OR "2-Perfluorooctylsulfonyl-N-ethylaminoethyl alcohol" OR "AI 3-29782" OR "EINECS 216-887-4" OR "EtFOSE" OR "FC 10" OR "Fluorad FC 10" OR "l2-(N-Ethylperfluoro-1-octanesulfonamido)ethanol" OR "LE 011" OR "N-EtFOSE" OR "N-Ethyl perfluorooctanesulfonamidoethanol" OR "N-Ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-1-octanesulfonamide" OR "N-Ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)octane-1-sulfonamide" OR "N-Ethyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide" OR "N-ethylheptadecafluoro-N-(2-hydroxyethyl)octanesulphonamide" OR "N-Ethylheptadecafluorooctanesulfonamidoethanol" OR "N-Ethylperfluorooctanesulfonamidoethanol" OR "N-Ethylperfluorooctanesulfonamidoethyl alcohol" OR "NEtFOSE" OR "PERFLUOROALKYL (C8) SULFONAMIDO-(N-ETHYL)ETHYL ALCOHOL" OR "1691-99-2" OR "N-Ethyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide" )

tiab:( "1-Octanesulfonamida, N-etil-1 ,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro -" OR "1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-" OR "4151-50-2" OR "AI 3-29757" OR "Alstar" OR "Alstar (pesticide)" OR "BRN 2317462" OR "EINECS 223-980-3" OR "EPA Pesticide Chemical Code 128992" OR "FiniTron" OR "Mirex S" OR "N-EtFOSA" OR "N-Ethyl perfluorooctanesulfonamide" OR "N-Ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonamide" OR "N-Ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonamide" OR "N-Ethylheptadecafluoroctansulfonamid" OR "N-Ethylheptadecafluorooctanesulfonamide" OR "N-ethylheptadecafluorooctanesulphonamide" OR "N-ethylperfluorooctane sulphonamide" OR "N-ethylperfluorooctane-1-sulfonamide" OR "N-Ethylperfluorooctanesulfonamide" OR "N-Ethylperfluorooctylsulfonamide" OR "N-etilheptadecafluorooctanosulfonamida" OR "NEtFOSA" OR "OCTANE SULFONAMIDE, N-ETHYLPERFLUORO-" OR "PC-128992" OR "Sulfluramid" OR "Sulfluramide" OR "UNII-IPX089YR0A" OR "Volcano" OR "Volcano (insecticide)" OR "4151-50-2" OR "N-Ethylperfluorooctanesulfonamide" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-N-methyl-" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-N-(2-hydroxyethyl)-N-methyl-1-octanesulfonamide" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-N-(2-hydroxyethyl)-N-methyloctane-1-sulfonamide" OR "2-(N-Methylperfluoro-1-octanesulfonamido)ethanol" OR "24448-09-7" OR "EINECS 246-262-1" OR "heptadecafluoro-N-(2-hydroxyethyl)-N-methyloctanesulphonamide" OR "MeFOSE" OR "MeFOSE Alcohol" OR "N-(2-Hydroxyethyl)-N-methylperfluorooctanesulfonamide" OR "N-MeFOSE" OR "N-Methyl perfluorooctanesulfonamidoethanol" OR "N-Methyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide" OR "N-Methyl-N-ethanolperfluorooctanesulfonamide" OR "N-Methylheptadecafluorooctanesulfonamidoethanol" OR "N-Methylperfluorooctanesulfonamide ethyl alcohol" OR "N-Methylperfluorooctanesulfonamidoethanol" OR "NMeFOSE" OR "24448-09-7" OR "N-Methyl-N-(2-hydroxyethyl)perfluorooctanesulfonamide" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-methyl-" OR "1-Octanesulfonamide,1,1,2,2,3,3,4,4,5,5,6,6,7,7, 8,8,8-heptadecafluoro-N-methyl-" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-N-methyl-1-octanesulfonamide" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-N-methyloctane-1-sulfonamide" OR "122526-47-0" OR "31506-32-8" OR "AI 3-29758" OR "Fluorad FX 12" OR "Heptadecafluor-N-methyloctansulfonamid" OR "Heptadecafluoro-N-methyl-1-octanesulfonamide" OR "Heptadecafluoro-N-methyloctanesulfonamide" OR "Heptadecafluoro-N-methyloctanesulphonamide" OR "heptadecafluoro-N-metiloctanosulfonamida" OR "N-MeFOSA" OR "N-Methyl perfluorooctanesulfonamide" OR "N-Methyl perfluorooctanesulphonamide" OR "N-Methylheptadecafluorooctanesulfonamide" OR "N-methylperfluorooctane sulphonamide" OR "N-Methylperfluorooctanesulfonamide" OR "NMeFOSA" OR "OCTANESULFONAMIDE, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-HEPTADECAFLUORO-N-METHYL-" OR "Perfluoro-N-methyloctanesulfonamide" OR "31506-32-8" OR "N-Methylperfluorooctanesulfonamide" )

tiab:( "1,1,1,2,2,3,3,4,4-Nonafluoro-4-iodobutane" OR "423-39-2" OR "Butane, 1,1,1,2,2,3,3,4,4-nonafluoro-4-iodo-" OR "EINECS 207-025-8" OR "Nonafluoro-1-iodobutane" OR "423-39-2" OR "Nonafluoro-1-iodobutane" )

tiab:( "13485-61-5" OR "2,2,3,3,4,4,5,5,5-Nonafluoropentanamide" OR "Nonafluoropentanamide" OR "Pentanamide, 2,2,3,3,4,4,5,5,5-nonafluoro-" OR "13485-61-5" OR "Nonafluoropentanamide" )

tiab:( "2,2,3,3,4,4,5,5-octafluorohexanediamide" OR "355-66-8" OR "Hexanediamide, 2,2,3,3,4,4,5,5-octafluoro-" OR "Octafluoroadipamide" OR "355-66-8" OR "Octafluoroadipamide" )

tiab:( "336-08-3" OR "62705-60-6" OR "EINECS 206-407-1" OR "Hexanedioic acid, 2,2,3,3,4,4,5,5-octafluoro-" OR "Octafluoroadipic acid" OR "Octafluorohexanedioic acid" OR "Perfluoroadipic acid" OR "336-08-3" OR "Octafluoroadipic acid" )

tiab:( "2,2,3,3,3-Pentafluoropropanoic anhydride" OR "2,2,3,3,3-Pentafluoropropionic anhydride" OR "356-42-3" OR "anhidrido pentafluoropropionico" OR "Anhydride pentafluoropropionique" OR "NSC 174167" OR "Pentafluoropropanoic anhydride" OR "Pentafluoropropionic acid anhydride" OR "Pentafluoropropionic anhydride" OR "Pentafluoropropionyl anhydride" OR "Pentafluorpropionsaureanhydrid" OR "Perfluoropropanoic anhydride" OR "Perfluoropropionic acid anhydride" OR "Perfluoropropionic anhydride" OR "Propanoic acid, 2,2,3,3,3-pentafluoro-, 1,1'-anhydride" OR "Propanoic acid, pentafluoro-, anhydride" OR "Propionic acid, pentafluoro-, anhydride" OR "356-42-3" OR "Pentafluoropropanoic anhydride" )

tiab:( "1-Propanamine, 1,1,2,2,3,3,3-heptafluoro-N,N-bis(1,1,2,2,3,3,3-heptafluoropropyl)-" OR "1-Propanamine, 1,1,2,2,3,3,3-heptafluoro-N,N-bis(heptafluoropropyl)-" OR "1,1,2,2,3,3,3-heptafluoro-N,N-bis(heptafluoropropyl)-1-propanamine" OR "1,1,2,2,3,3,3-Heptafluoro-N,N-bis(heptafluoropropyl)propan-1-amine" OR "1201928-45-1" OR "338-83-0" OR "EINECS 206-420-2" OR "F-tripropylamine" OR "FTPA" OR "Heneicosafluorotripropylamine" OR "heptafluoro-N,N-bis(heptafluoropropyl)-1-propanamine" OR "Perfluamina" OR "Perfluamine" OR "Perfluaminum" OR "perfluorotripropylamine" OR "UNII-3T396UK091" OR "338-83-0" OR "Perfluamine" )

tiab:( "NOCAS\_31859" OR "Perfluorinated compounds" OR "NOCAS\_31859" OR "Perfluorinated compounds" )

tiab:( "2-(Heptafluoropropoxy)tetrafluoropropionyl fluoride" OR "2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoyl fluoride" OR "2062-98-8" OR "75566-60-8" OR "HFPO dimer, acid fluoride" OR "HFPO-DA" OR "Perfluoro(2-methyl-3-oxahexanoyl) fluoride" OR "Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-" OR "2062-98-8" OR "Perfluoro(2-methyl-3-oxahexanoyl) fluoride" )

tiab:( "2,2,3,3,4,4-Hexafluoro-4-(trifluoromethoxy)butanoic acid" OR "863090-89-5" OR "Butanoic acid, 2,2,3,3,4,4-hexafluoro-4-(trifluoromethoxy)-" OR "Perfluoro(4-methoxybutanoic) acid" OR "PFECA A" OR "PFMOBA" OR "PFPE-7" OR "863090-89-5" OR "Perfluoro(4-methoxybutanoic) acid" )

tiab:( "173717-78-7" OR "2,2,3,3,5,5,6,6-Octafluoro-4-(trifluoromethyl)morpholine" OR "382-28-5" OR "EINECS 206-841-1" OR "Morpholine, 2,2,3,3,5,5,6,6-octafluoro-4-(trifluoromethyl)-" OR "Perfluoro(N-methylmorpholine)" OR "382-28-5" OR "Perfluoro(N-methylmorpholine)" )

tiab:( "1,1,1,2,2,3,3-Heptafluoro-3-((trifluorovinyl)oxy)propane" OR "1,1,1,2,2,3,3-Heptafluoro-3-[(trifluoroethenyl)oxy]propane" OR "1623-05-8" OR "EINECS 216-600-2" OR "HEPTAFLUOROPROPYL TRIFLUOROVINYL ETHER" OR "Perfluoro(propyl vinyl ether)" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]-" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-" OR "UNII-73R080E9WS" OR "1623-05-8" OR "Perfluoro(propyl vinyl ether)" )

tiab:( "2,3,3,3-Tetrafluoro-2-{1,1,2,3,3,3-hexafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propoxy}propanoic acid" OR "65294-16-8" OR "Perfluoro-(2,5,8-trimethyl-3,6,9-trioxadodecanoic)acid" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]propoxy]-" OR "65294-16-8" OR "Perfluoro-(2,5,8-trimethyl-3,6,9-trioxadodecanoic)acid" )

tiab:( "1,1,2,2,3,3,4,5,5,6-Decafluoro-4,6-bis(trifluoromethyl)cyclohexane" OR "335-27-3" OR "79956-40-4" OR "Cyclohexane, 1,1,2,2,3,3,4,5,5,6-decafluoro-4,6-bis(trifluoromethyl)-" OR "Cyclohexane, decafluoro-1,3-bis(trifluoromethyl)-" OR "Cyclohexane, perfluoro-1,3-dimethyl-" OR "Decafluoro-1,3-bis(trifluoromethyl)cyclohexane" OR "EINECS 206-386-9" OR "NSC 4782" OR "Perfluoro-1,3-dimethylcyclohexane" OR "Perfluoro(1,3-dimethylcyclohexane)" OR "UNII-Q1Y54IOL0P" OR "335-27-3" OR "Perfluoro-1,3-dimethylcyclohexane" )

tiab:( "1,1,1,2,2,3,3,4,4,5,5,6,6-Tridecafluoro-6-iodohexane" OR "355-43-1" OR "EINECS 206-586-6" OR "Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-6-iodo-" OR "Perfluoro-1-iodohexane" OR "Perfluorohexyl iodide" OR "UNII-A2A17JUG4R" OR "355-43-1" OR "Perfluoro-1-iodohexane" )

tiab:( "1-Octanesulfonyl chloride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-" OR "423-60-9" OR "Heptadecafluoro-1-octanesulfonyl chloride" OR "Heptadecafluorooctane-1-sulfonyl chloride" OR "Perfluoro-1-octanesulfonyl chloride" OR "423-60-9" OR "Perfluoro-1-octanesulfonyl chloride" )

tiab:( "13252-14-7" OR "2,3,3,3-Tetrafluor-2-[1,1,2,3,3,3-hexafluor-2-(heptafluorpropoxy)propoxy]propionsaure" OR "2,3,3,3-Tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-1-propanoic acid" OR "2,3,3,3-Tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]propanoic acid" OR "2,3,3,3-Tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propanoic acid" OR "2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propionic acid" OR "acide 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propionique" OR "acido 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxi)propoxi]propionico" OR "EC 236-237-3" OR "EINECS 236-237-3" OR "Hexafluoropropylene oxide trimer acid" OR "HFPO (trimer carboxylate)" OR "HFPO-TA" OR "Perfluorinated octanoic acid (PFOA) derivative" OR "Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-[1,1" OR "13252-14-7" OR "Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid" )

tiab:( "(+/-)-Perfluoro(2-propoxypropionic) acid" OR "13252-13-6" OR "2-(Heptafluoropropoxy)tetrafluoropropionic acid" OR "2,3,3,3-Tetrafluor-2-(heptafluorpropoxy)propionsaure" OR "2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3,heptafluoropropoxy)propanoic acid" OR "2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid" OR "2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid" OR "528603-31-8" OR "83551-64-8" OR "acide 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionique" OR "acido 2,3,3,3-tetrafluoro-2-(heptafluoropropoxi)propionico" OR "EC 236-236-8" OR "EINECS 236-236-8" OR "GenX non-salted" OR "GenX parent acid" OR "hexafluoropropylene oxide dimer acid" OR "HFPO dimer acid" OR "HFPO-DA" OR "Perfluoro-2-(propyloxy)propionic acid" OR "Perfluoro-2-methyl-3-oxahexanoic acid" OR "Perfluoro-2-propoxypropanoic acid" OR "Perfluoro-2-propoxypropanoic acid (GenX)" OR "Perfluoro-2-propoxypropionic acid" OR "Perfluoro--propoxypropionic acid" OR "Perfluoro(2-methyl-3-oxahexanoic) acid" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-" OR "Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-" OR "Propionic acid, 2,3,3,3-tet" OR "13252-13-6" OR "Perfluoro-2-methyl-3-oxahexanoic acid" )

tiab:( "2,2-Difluoro-2-[1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(1,1,2,2,3,3,4,4,4-nonafluorobutoxy)ethoxy]ethoxy]acetic acid" OR "330562-41-9" OR "Acetic acid, 2,2-difluoro-2-[1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(1,1,2,2,3,3,4,4,4-nonafluorobutoxy)ethoxy]ethoxy]-" OR "Acetic acid, difluoro[1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(nonafluorobutoxy)ethoxy]ethoxy]-" OR "Difluoro{1,1,2,2-tetrafluoro-2-[1,1,2,2-tetrafluoro-2-(nonafluorobutoxy)ethoxy]ethoxy}acetic acid" OR "Perfluoro-3,6,9-trioxatridecanoic acid" OR "PFPE-6" OR "330562-41-9" OR "Perfluoro-3,6,9-trioxatridecanoic acid" )

tiab:( "151772-58-6" OR "2,2-Difluoro-2-[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]acetic acid" OR "Acetic acid, 2,2-difluoro-2-[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]-" OR "Acetic acid, difluoro[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]-" OR "Difluoro[1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethoxy]acetic acid" OR "NFDHA" OR "Nonafluoro-3,6-dioxaheptanoic acid" OR "Perfluoro-3,6-dioxaheptanoic acid" OR "PFECA B" OR "PFPE-3" OR "151772-58-6" OR "Perfluoro-3,6-dioxaheptanoic acid" )

tiab:( "2,2'-((Perfluoroethane-1,2-diyl)bis(oxy))bis(2,2-difluoroacetic acid)" OR "2,2'-[(1,1,2,2-Tetrafluoroethane-1,2-diyl)bis(oxy)]bis(difluoroacetic acid)" OR "55621-21-1" OR "Acetic acid, 2,2'-[(1,1,2,2-tetrafluoro-1,2-ethanediyl)bis(oxy)]bis[2,2-difluoro-" OR "Perfluoro-3,6-dioxaoctane-1,8-dioic acid" OR "55621-21-1" OR "Perfluoro-3,6-dioxaoctane-1,8-dioic acid" )

tiab:( "1,1,1,2,2,3,3-Heptafluoro-3-(1,2,2,2-tetrafluoroethoxy)propane" OR "1,2,2,2-Tetrafluoroethyl heptafluoropropyl ether" OR "3330-15-2" OR "Du Pont E 1" OR "E1" OR "Ether, heptafluoropropyl 1,2,2,2-tetrafluoroethyl" OR "Fluoroether E-1" OR "Freon E 1" OR "Heptafluoropropyl 1,2,2,2-tetrafluoroethyl ether" OR "HEPTAFLUORPROPYL-(1H-TETRAFLUORAETHYL)-AETHER" OR "HPPVE" OR "Perfluoro-3-(1H-perfluoroethoxy)propane" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-(1,2,2,2-tetrafluoroethoxy)-" OR "3330-15-2" OR "Perfluoro-3-(1H-perfluoroethoxy)propane" )

tiab:( "2,2,3,3-Tetrafluoro-3-(trifluoromethoxy)propanoic acid" OR "377-73-1" OR "BRN 1795024" OR "Perfluoro-3-methoxypropanoic acid" OR "Perfluoromethoxypropionic acid" OR "PFMOPrA" OR "PFPE-2" OR "Propanoic acid, 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)-" OR "Propionic acid, 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)-" OR "377-73-1" OR "Perfluoro-3-methoxypropanoic acid" )

tiab:( "2,2,3,3,4,4-Hexafluoro-4-[(1,1,1,2,3,3,3-heptafluoro-2-propanyl)oxy]butanoic acid" OR "2,2,3,3,4,4-Hexafluoro-4-[(1,1,1,2,3,3,3-heptafluoropropan-2-yl)oxy]butanoic acid" OR "4-(Heptafluoroisopropoxy)hexafluorobutanoic acid" OR "4-(Heptafluoropropane)hexafluorobutanoic acid" OR "801212-59-9" OR "Butanoic acid, 2,2,3,3,4,4-hexafluoro-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethoxy]-" OR "Butyric acid, hexafluoro-4-[tetrafluoro-1-(trifluoromethyl)ethoxy]-" OR "Perfluoro-4-isopropoxybutanoic acid" OR "Perfluoro-6-methyl-5-oxaheptanoic acid" OR "PFPE-1" OR "801212-59-9" OR "Perfluoro-4-isopropoxybutanoic acid" )

tiab:( "1-Butanesulfonato, 1,1,2,2,3,3,4,4,4-nonafluoro-, ion(1-)" OR "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, ion(1-)" OR "45187-15-3" OR "Nonafluoro-1-butanesulfonate" OR "Nonafluorobutane-1-sulfonatato" OR "Nonafluorobutane-1-sulfonate" OR "Perfluorobutane sulfonate" OR "Perfluorobutanesulfonate" OR "Perfluorobutyl sulfonate" OR "PFBS ion(-1)" OR "PFBS\_ion" OR "45187-15-3" OR "Perfluorobutanesulfonate" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-" OR "1-Butanesulfonic acid, nonafluoro-" OR "1-Perfluorobutanesulfonic acid" OR "1,1,2,2,3,3,4,4,4-Nonafluoro-1-butanesulfonic acid" OR "375-73-5" OR "59933-66-3" OR "749861-23-2" OR "Eftop FBSA" OR "EINECS 206-793-1" OR "FC-98" OR "nonafluoro-1-butanesulfonic acid" OR "Nonafluorobutane-1-sulfonic acid" OR "nonafluorobutanesulfonic acid" OR "perfluorobutane-1-sulfonic acid" OR "Perfluorobutanesulfonic acid" OR "PFBS" OR "375-73-5" OR "Perfluorobutanesulfonic acid" )

tiab:( "1,1,2,2,3,3,4,4,4-Nonafluorobutane-1-sulphonic anhydride" OR "36913-91-4" OR "EINECS 253-270-9" OR "Perfluorobutanesulfonic anhydride" OR "36913-91-4" OR "Perfluorobutanesulfonic anhydride" )

tiab:( "1-Butanesulfonyl fluoride, 1,1,2,2,3,3,4,4,4-nonafluoro-" OR "1,1,2,2,3,3,4,4,4-Nonafluorobutane-1-sulphonyl fluoride" OR "1219958-98-1" OR "375-72-4" OR "CERAPP\_27301" OR "Nonafluorobutane-1-sulfonyl fluoride" OR "Perfluorobutanesulfonyl fluoride" OR "PFBS-F" OR "375-72-4" OR "Perfluorobutanesulfonyl fluoride" )

tiab:( "2,2,3,3,4,4,4-Heptafluorobutanoic acid" OR "375-22-4" OR "4-02-00-00810" OR "Acide heptafluorobutyrique" OR "acido heptafluorobutirico" OR "BRN 1426882" OR "Butanoic acid, 2,2,3,3,4,4,4-heptafluoro-" OR "Butanoic acid, heptafluoro-" OR "Butyric acid, heptafluoro-" OR "EC 206-786-3" OR "EINECS 206-786-3" OR "Fluorad FC 23" OR "Heptafluorbuttersaure" OR "Heptafluoro-1-butanoic acid" OR "Heptafluorobutanoic acid" OR "heptafluorobutyric acid" OR "Kyselina heptafluormaselna" OR "NSC 820" OR "Perfluoro-n-butanoic acid" OR "Perfluorobutanoic acid" OR "Perfluorobutyric acid" OR "Perfluoropropanecarboxylic acid" OR "PFBA" OR "375-22-4" OR "Perfluorobutanoic acid" )

tiab:( "1,1,2-trifluoro-1-methoxy-2-(trifluoromethoxy)ethane" OR "2,2,3,3,4,4,4-Heptafluorobutanal" OR "375-02-0" OR "Butanal, 2,2,3,3,4,4,4-heptafluoro-" OR "EINECS 206-783-7" OR "Heptafluorobutyraldehyde" OR "Perfluorobutyraldehyde" OR "375-02-0" OR "Perfluorobutyraldehyde" )

tiab:( "1,2,2,3,3,4,4,5,5,6,6-Undecafluorocyclohexane-1-carbonyl fluoride" OR "6588-63-2" OR "Cyclohexanecarbonyl fluoride, 1,2,2,3,3,4,4,5,5,6,6-undecafluoro-" OR "Perfluorocyclohexanecarbonyl fluoride" OR "6588-63-2" OR "Perfluorocyclohexanecarbonyl fluoride" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Nonadecafluorodecanoic acid" OR "335-76-2" OR "4-02-00-01052" OR "acide nonadecafluorodecanoique" OR "acido nonadecafluorodecanoico" OR "BRN 1810811" OR "Decanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-" OR "Decanoic acid, nonadecafluoro-" OR "EC 206-400-3" OR "EINECS 206-400-3" OR "Ndfda" OR "Nonadecafluordecansaeure" OR "Nonadecafluoro-n-decanoic acid" OR "Nonadecafluorodecanoic acid" OR "Perfluoro-1-nonanecarboxylic acid" OR "Perfluoro-n-decanoic acid" OR "Perfluorocapric acid" OR "Perfluorodecanoic acid" OR "PFDA" OR "335-76-2" OR "Perfluorodecanoic acid" )

tiab:( "2,2,3,3,4,4-hexafluoropentanedioyl difluoride" OR "678-78-4" OR "EINECS 211-652-2" OR "Hexafluoroglutaryl difluoride" OR "Hexafluoroglutaryl fluoride" OR "Hexafluoropentanedioyl difluoride" OR "Pentanedioyl difluoride, 2,2,3,3,4,4-hexafluoro-" OR "Perfluoroglutaryl difluoride" OR "678-78-4" OR "Perfluoroglutaryl difluoride" )

tiab:( "1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-, ion(1-)" OR "146689-46-5" OR "Pentadecafluoro-1-heptanesulfonate" OR "Pentadecafluoroheptane-1-sulfonate" OR "Perfluoroheptanesulfonate" OR "Perfluroheptane sulfonate" OR "PFHpS\_ion" OR "146689-46-5" OR "Perfluoroheptanesulfonate" )

tiab:( "1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-" OR "1-Heptanesulfonic acid, pentadecafluoro-" OR "1-Perfluoroheptanesulfonic acid" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-Pentadecafluorheptan-1-sulfonsaure" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-Pentadecafluoro-1-heptanesulfonic acid" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-Pentadecafluoroheptane-1-sulfonic acid" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoroheptane-1-sulphonic acid" OR "375-92-8" OR "acide 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoroheptane-1-sulfonique" OR "acido 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoroheptano-1-sulfonico" OR "EINECS 206-800-8" OR "Pentadecafluoro-1-heptanesulfonic acid" OR "Pentadecafluoroheptane-1-sulfonic acid" OR "Perfluoroheptanesulfonic acid" OR "PFHpS" OR "375-92-8" OR "Perfluoroheptanesulfonic acid" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,7-Tridecafluoroheptanoic acid" OR "375-85-9" OR "Acide perfluoroheptanoique" OR "acido perfluoroheptanoico" OR "EC 206-798-9" OR "EINECS 206-798-9" OR "Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoro-" OR "Heptanoic acid, tridecafluoro-" OR "Perfluorheptansaure" OR "Perfluoro-n-heptanoic acid" OR "Perfluoroenanthic acid" OR "Perfluoroheptanoic acid" OR "PFHpA" OR "Tridecafluoro-1-heptanoic acid" OR "Tridecafluoroheptanoic acid" OR "375-85-9" OR "Perfluoroheptanoic acid" )

tiab:( "1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-" OR "1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluoro-1-hexanesulfonamide" OR "1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluorohexane-1-sulfonamide" OR "41997-13-1" OR "Perfluorohexanesulfonamide" OR "41997-13-1" OR "Perfluorohexanesulfonamide" )

tiab:( "1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-" OR "1-Hexanesulfonic acid, tridecafluoro-" OR "1-Perfluorohexanesulfonic acid" OR "1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluoro-1-hexanesulfonic acid" OR "1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluorohexane-1-sulfonic acid" OR "355-46-4" OR "acide perfluorohexane-1-sulfonique" OR "acido perfluorohexano-1-sulfonico" OR "EC 206-587-1" OR "EINECS 206-587-1" OR "Perfluorhexan-1-sulfonsaure" OR "Perfluorohexane sulfonic acid (PFHxS)" OR "Perfluorohexane-1-sulphonic acid" OR "Perfluorohexanesulfonic acid" OR "PFHS" OR "PFHxS" OR "Tridecafluorohexane-1-sulfonic acid" OR "Tridecafluorohexanesulfonic acid" OR "355-46-4" OR "Perfluorohexanesulfonic acid" )

tiab:( "2,2,3,3,4,4,5,5,6,6,6-Undecafluorohexanoic acid" OR "307-24-4" OR "EINECS 206-196-6" OR "Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-" OR "Hexanoic acid, undecafluoro-" OR "NSC 5213" OR "Perfluoro-1-pentanecarboxylic acid" OR "Perfluoro-n-hexanoic acid" OR "Perfluorohexanoic acid" OR "PFHxA" OR "Undecafluoro-1-hexanoic acid" OR "Undecafluorocaproic acid" OR "Undecafluorohexanoic acid" OR "UNII-ZP34Q2220R" OR "307-24-4" OR "Perfluorohexanoic acid" )

tiab:( "1-methoxy 1,1,2,3,3,3-hexafluoro trifluorobutane" OR "1-methoxy-2-(trifluoromethyl)-1,1,2,3,3,3-hexafluoropropane" OR "1,1,2,3,3,3-Hexafluoro-1-methoxy-2-(trifluoromethyl)propane" OR "163702-08-7" OR "2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane" OR "2-[(Difluoromethoxy)methyl]-1,1,1,2,3,3,3-heptafluoropropane" OR "2-[difluoro(methoxy)methyl]-1,1,1,2,3,3,3-heptafluoropropane" OR "DIFLUORMETHOXY-((HEPTAFLUORISOPROPYL)-METHYL)-AETHER" OR "EC 605-340-9" OR "HFE-7100" OR "i 7100" OR "Methyl nonafluoroisobutyl ether" OR "Methyl perfluoroisobutyl ether" OR "Perfluoroisobutyl methyl ether" OR "Propane, 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoro-" OR "Propane, 2-[(difluoromethoxy)methyl]-1,1,1,2,3,3,3-heptafluoro-" OR "163702-08-7" OR "Perfluoroisobutyl methyl ether" )

tiab:( "1805-22-7" OR "Cyclopentane, nonafluoro(trifluoromethyl)-" OR "EINECS 217-298-5" OR "Nonafluoro(trifluoromethyl)cyclopentane" OR "Perfluoromethylcyclopentane" OR "UNII-8S014W4T75" OR "1805-22-7" OR "Perfluoromethylcyclopentane" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-Heptadecafluorononanoic acid" OR "375-95-1" OR "C 1800" OR "EINECS 206-801-3" OR "Heptadecafluornonansaeure" OR "Heptadecafluorononanoic acid" OR "Heptadekafluornonansaeure" OR "Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-" OR "Nonanoic acid, heptadecafluoro-" OR "Perfluornonansaeure" OR "perfluoro-n-nonanoic acid" OR "perfluorononan-1-oic acid" OR "Perfluorononanoic acid" OR "Perfluorononanoic acid (PFNA)" OR "Perfluorononanoic acidPFNA" OR "Perfluoropelargonic acid" OR "PFNA" OR "UNII-5830Z6S63M" OR "375-95-1" OR "Perfluorononanoic acid" )

tiab:( "1-Octene, 1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hexadecafluoro-" OR "1,1,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Hexadecafluorooct-1-ene" OR "559-14-8" OR "EINECS 209-202-5" OR "Perfluorooct-1-ene" OR "559-14-8" OR "Perfluorooct-1-ene" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Pentadecafluorooctanamide" OR "423-54-1" OR "EINECS 207-027-9" OR "Octanamide, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-" OR "Perfluorooctanamide" OR "423-54-1" OR "Perfluorooctanamide" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Pentadecafluorooctanimidamide" OR "307-31-3" OR "Octanimidamide, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-" OR "Perfluorooctanamidine" OR "307-31-3" OR "Perfluorooctanamidine" )

tiab:( "1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-octadecafluorooctane" OR "1201928-71-3" OR "156930-33-5" OR "307-34-6" OR "BRN 1717142" OR "Eftop EF-L 100" OR "EINECS 206-199-2" OR "n-perfluorooctane" OR "Octadecafluorooctane" OR "Octane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-octadecafluoro-" OR "Octane, octadecafluoro-" OR "Perfluoroctan" OR "Perfluorooctane" OR "UNII-6P60ZBK0QL" OR "307-34-6" OR "Perfluorooctane" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt" OR "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt (1:1)" OR "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monoammonium salt" OR "76752-72-2" OR "Ammonium [(heptadecafluorooctyl)sulfonyl]azanide" OR "Perfluorooctanesulfonamide ammonium salt (1:1)" OR "76752-72-2" OR "Perfluorooctanesulfonamide ammonium salt (1:1)" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, lithium salt (1:1)" OR "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monolithium salt" OR "76752-79-9" OR "Lithium [(heptadecafluorooctyl)sulfonyl]azanide" OR "Perfluorooctanesulfonamide lithium salt (1:1)" OR "76752-79-9" OR "Perfluorooctanesulfonamide lithium salt (1:1)" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monopotassium salt" OR "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt (1:1)" OR "76752-70-0" OR "Perfluorooctanesulfonamide potassium salt (1:1)" OR "Potassium [(heptadecafluorooctyl)sulfonyl]azanide" OR "76752-70-0" OR "Perfluorooctanesulfonamide potassium salt (1:1)" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, monosodium salt" OR "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, sodium salt (1:1)" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, sodium salt (1:1)" OR "76752-78-8" OR "Perfluorooctanesulfonamide sodium salt (1:1)" OR "Sodium [(heptadecafluorooctyl)sulfonyl]azanide" OR "76752-78-8" OR "Perfluorooctanesulfonamide sodium salt (1:1)" )

tiab:( "1-Octanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octanesulfonamide" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonamide" OR "754-91-6" OR "AI 3-29759" OR "Desethylsulfluramid" OR "EINECS 212-046-0" OR "Heptadecafluoroctansulfonamid" OR "heptadecafluorooctanesulfonamide" OR "heptadecafluorooctanesulphonamide" OR "heptadecafluorooctanosulfonamida" OR "OCTANESULFONAMIDE, HEPTADECAFLUORO-" OR "Perfluoroctylsulfonamide" OR "Perfluorooctanesulfonamide" OR "Perfluorooctanesulfonic acid amide" OR "Perfluorooctylsulfonamide" OR "PFOSA" OR "UNII-80AM718FML" OR "754-91-6" OR "Perfluorooctanesulfonamide" )

tiab:( "[3-[[(heptadecafluorooctyl)sulphonyl]amino]propyl]trimethylammonium iodide" OR "1-Propanaminium, 3-(((heptadecafluorooctyl)sulfonyl)amino)-N,N,N-trimethyl-, iodide" OR "1-Propanaminium, 3-[[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctyl)sulfonyl]amino]-N,N,N-trimethyl-, iodide (1:1)" OR "153810-83-4" OR "1652-63-7" OR "3-(((Heptadecafluorooctyl)sulfonyl)amino)-N,N,N-trimethyl-1-propanaminium iodide" OR "3-[(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluorooctane-1-sulfonyl)amino]-N,N,N-trimethylpropan-1-aminium iodide" OR "34561-26-7" OR "39340-48-2" OR "54298-25-8" OR "94809-83-3" OR "EINECS 216-716-3" OR "Perfluorooctanesulfonamido ammonium iodide" OR "1652-63-7" OR "Perfluorooctanesulfonamido ammonium iodide" )

tiab:( "1-Octanesulfonato, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ion(1-)" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ion(1-)" OR "45298-90-6" OR "Heptadecafluorooctane-1-sulfonatato" OR "Heptadecafluorooctane-1-sulfonate" OR "Perfluorooctanesulfonate" OR "perfluorooctyl sulfonate" OR "PFOS ion(-1)" OR "PFOS\_ion" OR "45298-90-6" OR "Perfluorooctanesulfonate" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-" OR "1-Octanesulfonic acid, heptadecafluoro-" OR "1-Perfluorooctanesulfonic acid" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octanesulfonic acid" OR "132324-11-9" OR "1763-23-1" OR "EF 101" OR "Eftop EF 101" OR "EINECS 217-179-8" OR "heptadecafluoro-1-octanesulfonic acid" OR "heptadecafluorooctane-1-sulfonic acid" OR "heptadecafluorooctane-1-sulphonic acid" OR "Heptadecafluorooctanesulfonic acid" OR "perfluorooctane sulfonic acid" OR "perfluorooctane-1-sulfonic acid" OR "Perfluorooctanesulfonic acid" OR "Perfluorooctylsulfonic acid" OR "PFOS" OR "UNII-9H2MAI21CL" OR "1763-23-1" OR "Perfluorooctanesulfonic acid" )

tiab:( "1-Octanesulfonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octanesulfonyl fluoride" OR "307-35-7" OR "Heptadecafluoro-1-octanesulfonyl fluoride" OR "Heptadecafluorooctane-1-sulfonyl fluoride" OR "N-Perfluorooctanesulfonyl fluoride" OR "Perfluorooctanesulfonyl fluoride" OR "Perfluorooctylsulfonyl fluoride" OR "PFOS-F" OR "UNII-KPV81L86O0" OR "307-35-7" OR "Perfluorooctanesulfonyl fluoride" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoic acid" OR "335-67-1" OR "65618-66-8" OR "71244-15-0" OR "Acide pentadecafluorooctanoique" OR "acido pentadecafluorooctanoico" OR "BRN 1809678" OR "Eftop EF 201" OR "EINECS 206-397-9" OR "Hexanoyl fluoride, 3,3,4,4,5,5,6,6,6-nonafluoro-2-oxo-" OR "n-Perfluorooctanoic acid" OR "NSC 95114" OR "Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-" OR "Octanoic acid, pentadecafluoro-" OR "PENTADECAFLUOR-CAPRYLSAEURE" OR "Pentadecafluoro-1-octanoic acid" OR "Pentadecafluoro-n-octanoic" OR "PFOA acid" OR "Pentadecafluoroctansaure" OR "pentadecafluorooctanoic acid" OR "Perfluoro-1-heptanecarboxylic acid" OR "perfluoro-n-octanoic acid" OR "Perfluorocaprylic acid" OR "Perfluoroctanoic acid" OR "Perfluoroheptanecarboxylic acid" OR "Perfluorooctanoic acid" OR "335-67-1" OR "Perfluorooctanoic acid" )

tiab:( "2,2,3,3,4,4,5,5-Octafluoropentanamide" OR "355-81-7" OR "Pentanamide, 2,2,3,3,4,4,5,5-octafluoro-" OR "Perfluoropentanamide" OR "355-81-7" OR "Perfluoropentanamide" )

tiab:( "2,2,3,3,4,4,5,5,5-Nonafluoropentanoic acid" OR "2706-90-3" OR "Acide perfluorovalerique" OR "acido perfluorovalerico" OR "EC 220-300-7" OR "EINECS 220-300-7" OR "Nonafluoro-1-pentanoic acid" OR "Nonafluoropentanoic acid" OR "Nonafluorovaleric Acid" OR "NSC 18404" OR "Pentanoic acid, 2,2,3,3,4,4,5,5,5-nonafluoro-" OR "Pentanoic acid, nonafluoro-" OR "Perfluoro-n-pentanoic acid" OR "Perfluoropentanoic acid" OR "Perfluoropentanoic acidPFPeA" OR "Perfluorovaleric acid" OR "Perfluorvaleriansaure" OR "PFPeA" OR "Valeric acid, nonafluoro-" OR "2706-90-3" OR "Perfluoropentanoic acid" )

tiab:( "2,2,3,3,3-Pentafluoropropanoic acid" OR "2,2,3,3,3-Pentafluoropropionic acid" OR "4-02-00-00739" OR "422-64-0" OR "Acide pentafluoropropionique" OR "acido pentafluoropropionico" OR "BRN 1773387" OR "EINECS 207-021-6" OR "Pentafluoropropanoic acid" OR "Pentafluoropropionic acid" OR "Pentafluorpropionsaure" OR "Perfluoropropanoic acid" OR "PFPA" OR "PFPrA" OR "Propanoic acid, 2,2,3,3,3-pentafluoro-" OR "Propanoic acid, pentafluoro-" OR "PROPIONIC ACID, 2,2,3,3,3-PENTAFLUORO-" OR "Propionic acid, pentafluoro-" OR "422-64-0" OR "Perfluoropropanoic acid" )

tiab:( "2,5-Furandione, 3,3,4,4-tetrafluorodihydro-" OR "3,3,4,4-Tetrafluorooxolane-2,5-dione" OR "699-30-9" OR "EINECS 211-832-0" OR "Perfluorosuccinic anhydride" OR "Tetrafluorosuccinic anhydride" OR "699-30-9" OR "Perfluorosuccinic anhydride" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-Heptacosafluorotetradecanoic acid" OR "376-06-7" OR "acide heptacosafluorotetradecanoique" OR "acido heptacosafluorotetradecanoico" OR "EC 206-803-4" OR "EINECS 206-803-4" OR "heptacosafluorotetradecanoic acid" OR "Heptacosafluortetradecansaure" OR "Perfluoro-n-tetradecanoic acid" OR "perfluoromyristic acid" OR "Perfluorotetradecanecarboxylic acid" OR "Perfluorotetradecanoic acid" OR "PerfluorotetradecanoicPFTeDA" OR "PFTA" OR "PFTeDA" OR "PFTetA" OR "PFTreA" OR "Tetradecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-heptacosafluoro-" OR "Tetradecanoic acid, heptacosafluoro-" OR "376-06-7" OR "Perfluorotetradecanoic acid" )

tiab:( "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-Pentacosafluorotridecanoic acid" OR "72629-94-8" OR "acide pentacosafluorotridecanoique" OR "acido pentacosafluorotridecanoico" OR "EC 276-745-2" OR "EINECS 276-745-2" OR "pentacosafluorotridecanoic acid" OR "Pentacosafluortridecansaure" OR "Perfluoro-n-tridecanoic acid" OR "Perfluorotridecanoic acid" OR "PFTrDA" OR "PFTriA" OR "PFTriDA" OR "Tridecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,13-pentacosafluoro-" OR "Tridecanoic acid, pentacosafluoro-" OR "72629-94-8" OR "Perfluorotridecanoic acid" )

tiab:( "110961-38-1" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heneicosafluoroundecanoic acid" OR "2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-Heneicosafluoroundecanoic acid" OR "2058-94-8" OR "acide henicosafluoroundecanoique" OR "acido henicosafluoroundecanoico" OR "EINECS 218-165-4" OR "Heneicosafluoroundecanoic acid" OR "henicosafluoroundecanoic acid" OR "Henicosafluorundecansaure" OR "Perfluoro-n-undecanoic acid" OR "Perfluoroundecanoic acid" OR "Perfluoroundecanoic acidPFUdA" OR "Perfluoroundecylic acid" OR "PFUdA" OR "PFUnA" OR "PFUnDA" OR "Undecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heneicosafluoro-" OR "Undecanoic acid, heneicosafluoro-" OR "2058-94-8" OR "Perfluoroundecanoic acid" )

tiab:( "1-BUTANESULFONIC ACID, 1,1,2,2,3,3,4,4,4- NONFLUORO-, POTASSIUM SALT" OR "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, potassium salt" OR "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, potassium salt (1:1)" OR "1,1,2,2,3,3,4,4,4-Nonafluoro-1-butanesulfonic acid potassium salt" OR "1,1,2,2,3,3,4,4,4-Nonafluorobutane-1-sulfonate de potassium" OR "1,1,2,2,3,3,4,4,4-Nonafluorobutane-1-sulfonic acid, potassium salt" OR "1,1,2,2,3,3,4,4,4-nonafluorobutano-1-sulfonato de potasio" OR "29420-49-3" OR "Bayowet C 4" OR "Bayowet C 4TP-AC2001" OR "Biowet C 4" OR "BUTANE-1-SULFONATE, NONAFLUORO-, POTASSIUM" OR "Chemguard 411" OR "EC 249-616-3" OR "Eftop KFBS" OR "EINECS 249-616-3" OR "Flutel RM 65" OR "IHT-FR 21" OR "K-NONA" OR "Kalium-1,1,2,2,3,3,4,4,4-nonafluorbutan-1-sulfonat" OR "KPFBS" OR "Megafac F 114" OR "Megafac F 114P" OR "Megafac F 144P" OR "Megafac F 411" OR "Nanofluorobutanesulfonic acid potassium salt" OR "Nonafluoro-1-butanesulfonate potassium salt" OR "Nonafluorobutanesulfonic acid potassium salt" OR "Perfluorobutanesulfonic acid potassium salt" OR "PFBS-K" OR "PFBSA" OR "potassium 1,1,2,2,3,3,4,4,4-nonafluoro" OR "29420-49-3" OR "Potassium perfluorobutanesulfonate" )

tiab:( "1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, potassium salt" OR "1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, potassium salt (1:1)" OR "1-Hexanesulfonic acid, tridecafluoro-, potassium salt" OR "1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluoro-1-hexanesulfonic acid potassium salt" OR "1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluorohexane-1-sulfonic acid, potassium salt" OR "3871-99-6" OR "EINECS 223-393-2" OR "HEXANESULFONATE, 1,1,2,2,3,3,4,4,5,5,6,6,6- TRIDECAFLUORO-, POTASSIUM" OR "Kaliumperfluorhexan-1-sulfonat" OR "Perfluorohexane-1-sulfonate de potassium" OR "perfluorohexano-1-sulfonato de potasio" OR "PFHS-K" OR "PFHxS-K" OR "Potassium (perfluorohexyl)sulfonate" OR "potassium 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate" OR "Potassium perfluoro-1-hexanesulfonate" OR "potassium perfluorohexane-1-sulphonate" OR "Potassium perfluorohexanesulfonate" OR "Potassium tridecafluorohexane-1-sulfonate" OR "Tridecafluorohexanesulfonic acid potassium salt" OR "3871-99-6" OR "Potassium perfluorohexanesulfonate" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt (1:1)" OR "1-Octanesulfonic acid, heptadecafluoro-, potassium salt" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octanesulfonic acid, potassium salt" OR "111274-79-4" OR "117925-64-1" OR "2795-39-3" OR "59112-13-9" OR "62010-27-9" OR "69458-54-4" OR "Eftop EF 102" OR "EINECS 220-527-1" OR "Fluorad 95" OR "Fluorad FC 95" OR "Fluortensid FT 800" OR "Heptadecafluorooctane-1-sulfonate de potassium" OR "Heptadecafluorooctanesulfonic acid potassium salt" OR "Heptadecafluorooctanesulfonic acid, potassium salt" OR "heptadecafluorooctano-1-sulfonato de potasio" OR "Kaliumheptadecafluoroctan-1-sulfonat" OR "Megafac F 110" OR "Megafac F 116" OR "NSC 18405" OR "OCTANE-1-SULFONATE, 1,1,2,2,3,3,4,4,5,5,6,6, 7,7,8,8,8-HEPTADECAFLUORO-POTASSIUM" OR "OCTANE-1-SULFONIC ACID, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-HEPTADECAFLUORO-, POTASSIUM SALT" OR "OCTYLSULFONATE, HEPTADECAFLUORO-, POTASSIUM" OR "Perfluorooct" OR "2795-39-3" OR "Potassium perfluorooctanesulfonate" )

tiab:( "1,1-Difluoroethene, 1-((trifluoroethenyl)oxy)heptafluoropropane, tetrafluoroethene polymer" OR "74499-68-6" OR "POLYFLGSID\_880975" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-((1,2,2-trifluoroethenyl)oxy)-, polymer with 1,1-difluoroethene and 1,1,2,2-tetrafluoroethene" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-((trifluoroethenyl)oxy)-, polymer with 1,1-difluoroethene and tetrafluoroethene" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-, polymer with 1,1-difluoroethene and tetrafluoroethene" OR "74499-68-6" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-, polymer with 1,1-difluoroethene and tetrafluoroethene" )

tiab:( "202069-61-2" OR "35397-13-8" OR "POLYFLGSID\_880435" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-((1,2,2-trifluoroethenyl)oxy)-, polymer with 1-chloro-1,2,2-trifluoroethene and ethene" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]-, polymer with 1-chloro-1,2,2-trifluoroethene and ethene" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-, polymer with chlorotrifluoroethene and ethene" OR "35397-13-8" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-, polymer with chlorotrifluoroethene and ethene" )

tiab:( "1105648-10-9" OR "1185142-74-8" OR "1202864-80-9" OR "1215383-29-1" OR "141256-21-5" OR "143749-21-7" OR "150825-75-5" OR "155421-05-9" OR "177529-56-5" OR "193098-76-9" OR "1955483-44-9" OR "26655-00-5" OR "287188-81-2" OR "303122-86-3" OR "50923-04-1" OR "65216-30-0" OR "676599-75-0" OR "721962-52-3" OR "78690-67-2" OR "876858-01-4" OR "89964-13-6" OR "97709-05-2" OR "98846-34-5" OR "99551-00-5" OR "Ethanesulfonyl fluoride, 2-(1-(difluoro((1,2,2-trifluoroethenyl)oxy)methyl)-1,2,2,2-tetrafluoroethoxy)-1,1,2,2-tetrafluoro-, polymer with 1,1,2,2-tetrafluoroethene" OR "Ethanesulfonyl fluoride, 2-(1-(difluoro((trifluoroethenyl)oxy)methyl)-1,2,2,2-tetrafluoroethoxy)-1,1,2,2-tetrafluoro-, polymer with tetrafluoroethene" OR "POLYFLGSID\_880383" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-((1,2,2-trifluoroethenyl)oxy)-, polymer with 1,1,2,2-tetrafluoroethene" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethenyl)oxy]-, polymer with 1,1,2,2-tetrafluoroethene" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-, polymer with tetrafluoroethene" OR "26655-00-5" OR "Propane, 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-, polymer with tetrafluoroethene" )

tiab:( "NOCAS\_897587" OR "Propanoic acid, 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)-, anhydride with 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)propanoic acid" OR "NOCAS\_897587" OR "Propanoic acid, 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)-, anhydride with 2,2,3,3-tetrafluoro-3-(trifluoromethoxy)propanoic acid" )

tiab:( "1562378-37-3" OR "63863-44-5" OR "79948-25-7" OR "87365-91-1" OR "POLYFLGSID\_880533" OR "Propanoic acid, 3-(1-(difluoro((1,2,2-trifluoroethenyl)oxy)methyl)-1,2,2,2-tetrafluoroethoxy)-2,2,3,3-tetrafluoro-, methyl ester, polymer with 1,1,2,2-tetrafluoroethene" OR "Propanoic acid, 3-(1-(difluoro((trifluoroethenyl)oxy)methyl)-1,2,2,2-tetrafluoroethoxy)-2,2,3,3-tetrafluoro-, methyl ester, polymer with tetrafluoroethene" OR "Propanoic acid, 3-[1-[difluoro[(1,2,2-trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester, polymer with 1,1,2,2-tetrafluoroethene" OR "Propanoic acid, 3-[1-[difluoro[(trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester, polymer with tetrafluoroethene" OR "63863-44-5" OR "Propanoic acid, 3-[1-[difluoro[(trifluoroethenyl)oxy]methyl]-1,2,2,2-tetrafluoroethoxy]-2,2,3,3-tetrafluoro-, methyl ester, polymer with tetrafluoroethene" )

tiab:( "1,1,1,3,3,3-Hexafluoro-2-(fluoromethoxy)propane" OR "28523-86-6" OR "347mmzE" OR "BRN 2041023" OR "Ether, fluoromethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl" OR "Ether, fluoromethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl-" OR "Fluoromethyl 1,1,1,3,3,3-hexafluoro-2-propyl ether" OR "Fluoromethyl 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ether" OR "Propane, 1,1,1,3,3,3-hexafluoro-2-(fluoromethoxy)-" OR "Sevofluran" OR "Sevoflurane" OR "Sevoflurano" OR "Sevofluranum" OR "Sevofrane" OR "Sevorane" OR "Sojourn" OR "UNII-38LVP0K73A" OR "28523-86-6" OR "Sevoflurane" )

tiab:( "1207462-13-2" OR "Hexanoic acid, 4,4,5,5,6,6,6-heptafluoro-, sodium salt (1:1)" OR "Sodium 3-(perfluoropropyl)propanoate" OR "Sodium 4,4,5,5,6,6,6-heptafluorohexanoate" OR "1207462-13-2" OR "Sodium 3-(perfluoropropyl)propanoate" )

tiab:( "1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafluoro-, sodium salt" OR "1-Decanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heneicosafluoro-, sodium salt (1:1)" OR "2806-15-7" OR "PFDS-Na" OR "Sodium henicosafluoro-1-decanesulfonate" OR "Sodium henicosafluorodecane-1-sulfonate" OR "Sodium perfluorodecanesulfonate" OR "2806-15-7" OR "Sodium perfluorodecanesulfonate" )

tiab:( "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, sodium salt" OR "1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, sodium salt (1:1)" OR "1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-HEPTADECAFLUORO-1-OCTANESULFONATE" OR "122303-47-3" OR "4021-47-0" OR "Eftop EF 103" OR "PFOS-Na" OR "Sodium heptadecafluoro-1-octanesulfonate" OR "Sodium heptadecafluorooctane-1-sulfonate" OR "Sodium heptadecafluorooctanesulfonate" OR "Sodium perfluoro-1-octanesulfonate" OR "Sodium perfluorooctane sulfonate" OR "Sodium perfluorooctanesulfonate" OR "Sodium perfluorooctylsulfonate" OR "4021-47-0" OR "Sodium perfluorooctanesulfonate" )

tiab:( "111873-33-7" OR "N,N,N-Tributylbutan-1-aminium heptadecafluorooctane-1-sulfonate" OR "Tetrabutylammonium perfluorooctanesulfonate" OR "111873-33-7" OR "Tetrabutylammonium perfluorooctanesulfonate" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, salt with phosphonium, tetrabutyl- (1:1)" OR "220689-12-3" OR "Phosphonium, tetrabutyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)" OR "Phosphonium, tetrabutyl-, salt with 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonic acid (1:1)" OR "Tetrabutyl-phosphonium nonafluoro-butane-1-sulfonate" OR "Tetrabutylphosphanium nonafluorobutane-1-sulfonate" OR "Tetrabutylphosphonium perfluorobutanesulfonate" OR "220689-12-3" OR "Tetrabutylphosphonium perfluorobutanesulfonate" )

tiab:( "406215-31-4" OR "56773-42-3" OR "83046-54-2" OR "854620-32-9" OR "EINECS 260-375-3" OR "Ethanaminium, N,N,N-triethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1)" OR "N,N,N-Triethylethanaminium heptadecafluorooctane-1-sulfonate" OR "Tetraethylammonium perfluoroctanesulfonate" OR "Tetraethylammonium perfluorooctanesulfonate" OR "56773-42-3" OR "Tetraethylammonium perfluorooctanesulfonate" )

tiab:( "78560-45-9" OR "EINECS 278-947-6" OR "Silane, trichloro(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-" OR "Trichloro((perfluorohexyl)ethyl)silane" OR "Trichloro(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silane" OR "78560-45-9" OR "Trichloro((perfluorohexyl)ethyl)silane" )

tiab:( "1220778-92-6" OR "295329-01-0" OR "51851-37-7" OR "EINECS 257-473-3" OR "Silane, triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-" OR "Triethoxy((perfluorohexyl)ethyl)silane" OR "Triethoxy(1H,1H,2H,2H-perfluorooctyl)silane" OR "Triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silane" OR "UNII-814P46684U" OR "51851-37-7" OR "Triethoxy((perfluorohexyl)ethyl)silane" )

tiab:( "2,2,2-Trifluoroacetic acid" OR "4-02-00-00458" OR "76-05-1" OR "Acetic acid, 2,2,2-trifluoro-" OR "Acetic acid, trifluoro-" OR "Acide trifluoroacetique" OR "acido trifluoroacetico" OR "BRN 0742035" OR "EINECS 200-929-3" OR "Kyselina trifluoroctova" OR "NSC 77366" OR "PC-623802" OR "Perfluoroacetic acid" OR "TRIFLUORESSIGSAEURE" OR "Trifluoressigsaure" OR "Trifluoroacetic acid" OR "Trifluoroethanoic acid" OR "UN 2699" OR "UNII-E5R8Z4G708" OR "76-05-1" OR "Trifluoroacetic acid" )

tiab:( "1,1,1-trifluoromethanesulfonic acid" OR "1071724-18-9" OR "1075754-75-4" OR "132645-03-5" OR "146819-41-2" OR "1493-13-6" OR "410094-25-6" OR "686276-05-1" OR "83936-79-2" OR "acide triflique" OR "Acide trifluoromethanesulfonique" OR "acido trifluorometanosulfonico" OR "CF3SO3H" OR "EINECS 216-087-5" OR "Fluorad FC 24" OR "HOTf" OR "Methanesulfonic acid, 1,1,1-trifluoro-" OR "Methanesulfonic acid, trifluoro-" OR "Perfluoromethanesulfonic acid" OR "TfOH" OR "Triflic acid" OR "Trifluormethansulfonsaeure" OR "trifluoromethane sulfonic acid" OR "Trifluoromethanesulfonic acid" OR "trifluoromethanesulphonic acid" OR "Trifluoromethylsulfonic acid" OR "Trimsylate" OR "UNII-JE2SY203E8" OR "1493-13-6" OR "Trifluoromethanesulfonic acid" )

tiab:( "1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, trimethylsilyl ester" OR "68734-62-3" OR "Trimethylsilyl nonaflate" OR "Trimethylsilyl nonafluorobutane-1-sulfonate" OR "Trimethylsilyl nonafluorobutanesulfonate" OR "Trimethylsilyl perfluorobutanesulfonate" OR "68734-62-3" OR "Trimethylsilyl perfluorobutanesulfonate" )

tiab:( "17631-67-3" OR "3,5-Octanedione, 6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-, gadolinium complex" OR "3,5-Octanedione, 6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-, gadolinium salt (3:1)" OR "6,6,7,7,8,8,8-Heptafluoro-2,2-dimethyloctane-3,5-dione--gadolinium (3/1)" OR "Gadolinium, tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato-O,O')-" OR "Gadolinium, tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato-O,O')-" OR "Gadolinium, tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato-O3,O5)-" OR "Gadolinium, tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato)-" OR "NSC 379485" OR "Tris(1,1,1,2,2,3,3-heptafluoro-7,7-dimethyl-4,6-octanedionato)gadolinium" OR "Tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato-O3,O5)gadolinium" OR "Tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato)gadolinium" OR "Tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato)gadolinium(III)" OR "17631-67-3" OR "Tris(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionato)gadolinium(III)" )

tiab:( "2-[Bis(2,2,2-trifluoroethoxy)methoxy]-1,1,1-trifluoroethane" OR "58244-27-2" OR "Ethane, 2,2',2''-[methylidynetris(oxy)]tris[1,1,1-trifluoro-" OR "Tris(2,2,2-trifluoroethyl)orthoformate" OR "tris(Trifluoroethoxy)methane" OR "58244-27-2" OR "tris(Trifluoroethoxy)methane" )

# Version 1.43, Commit 916b3b181bd: 8.29.2019

## Added Environmental Fate (beta) query to the Evidence Stream Category

The Environmental Fate (beta) query was added to the Evidence Stream category. Keyword analysis provided by ICF’s KAT (Keyword Analysis Tool) and Sciome’s SWIFT Review on the titles and abstracts of 207 high-confidence, on-topic fate references (references with FinalOverallScore < 3 in the document, Fate\_Scores\_20190131.xlsx)

tiab: ("bioaccumulation" OR "bioconcentration" OR "biodegradability" OR "biodegradation" OR "bioisomerization" OR "biomagnification" OR "biotransformation" OR "dechlorination" OR "degradation" OR "dehalogenation" OR "fate" OR "food web" OR "groundwater" OR "hydrolysis" OR "landfill" OR "persistence" OR "photodegradation" OR "photolysis" OR "phototransformation" OR "sediment" OR "sludge" OR "soil" OR "trophic magnification" OR "volatilization" OR "waste" OR "wastewater" OR ( ("concentration" OR "concentrations" OR "evaporation rates" OR "reaction" OR "sorption") AND ("aquifer" OR "atmospheric" OR "tropospheric" OR "water") ) )

# Version 1.43, Build 29597172bd1: 08.08.2019

## Updated Animal query and renamed query as Animal (human health models) in the Evidence Stream category

The Animal query in the Evidence Stream category was updated and the query name was changed to Animal (human health models)

## Animal (human health models)

mesh\_mh: ("animal experimentation" OR "models, animal" OR "behavior, animal" OR "animal population groups" OR "invertebrates" OR "chordata, nonvertebrate" OR "amphibians" OR "birds" OR "fishes" OR "reptiles" ~~OR "artiodactyla"~~ OR "carnivora" ~~OR "cetacea" OR "chiroptera" OR "elephants" OR "hyraxes"~~ OR "insectivora" OR "lagomorpha" ~~OR "marsupialia" OR "monotremata" OR "perissodactyla"~~ OR "rodentia" ~~OR "scandentia" OR "sirenia" OR "xenarthra"~~ OR "strepsirhini" OR "platyrrhini" OR "tarsii" OR "cercopithecidae" OR "hylobatidae" OR "gorilla gorilla" OR "pan paniscus" OR "pan troglodytes" OR "pongo pygmaeus") OR

mesh\_mh\_noexp: ("Animals" OR "chordata" OR "vertebrates" OR "mammals" OR "primates" OR "haplorhini" OR "catarrhini" OR "hominidae") OR

tiab: (animal\* OR mice OR mus OR mouse OR murine OR rats OR rat OR murinae OR muridae OR "cotton rat" OR "cotton rats" OR hamster\* ~~OR criceti?ae~~ OR rodent\* OR pigs OR pig OR swine\* OR piglet\* OR "guinea pigs" OR "guinea pig" OR cavia OR callithrix OR marmoset\* OR cebuella OR hapale OR octodon OR chinchilla\* OR gerbillinae OR gerbil\* OR rabbit\* OR hares OR hare OR cats OR cat OR carus OR felis OR dogs OR dog OR canine\* OR canis ~~OR sheep\* OR mouflon\* OR ovis OR goat\* OR capra~~ OR haplorhini OR monkey\* OR anthropoid\* OR saguinus OR tamarin\* OR leontopithecus OR hominidae OR ape OR apes OR "pan paniscus" OR bonobo\* OR "pan troglodytes" OR gibbon\* OR nomascus OR symphalangus OR chimpanzee\* OR prosimian\* OR pongidae OR gorilla\* OR "pongo pygmaeus" OR orangutan\* OR lemur\* OR lemuridae ~~OR horse\* OR equus OR cow OR calf OR bull~~ OR chicken\* OR gallus OR quail\* OR bird OR birds OR poultry OR fowl OR fowls OR reptil\* ~~OR snake\* OR lizard\*~~ OR turtle\* OR amphibia\* OR frog\* OR xenopus OR bombina OR salientia OR toad\* OR "epidalea calamita" OR salamander\* OR fish OR fishes OR pisces OR catfish OR perch OR percidae OR perca OR trout OR char OR salmon OR salvelinus OR minnow\* OR cyprinidae OR carp OR zebrafish OR "zebra fish" OR nematode\* OR elegans OR diptera OR flies OR dipteral OR drosophil\* ~~OR squirrel\* OR chipmunk\* OR bear OR bears OR ursidae OR dolphin\* OR porpoise\* OR whale\* OR cetacea)~~