



# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/11/2020

Revision date:

Version: 1.0

ES-5640

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixtures  
Product name : PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH  
Product code : ES-5640

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation)	H331
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 1	H370

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11  
T; R39/23/24/25  
Xi; R36/38

Full text of R-phrases: see section 16

#### GHS-US classification

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
Acute Tox. 3 (Inhalation)	H331
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 1	H370

Full text of H statements : see section 16

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### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02

GHS08

GHS06

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapor  
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H370 - Causes damage to organs

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting equipment  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.

### GHS-US labeling

Hazard pictograms (GHS-US)



GHS02

GHS08

GHS06

Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapor  
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H370 - Causes damage to organs

Precautionary statements (GHS-US)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical/ventilating/lighting equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 - If swallowed: Immediately call a poison center or doctor  
P302+P352 - If on skin: Wash with plenty of water  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P307+P311 - If exposed: Call a poison center/doctor  
P311 - Call a poison center or doctor  
P312 - Call a poison center or doctor if you feel unwell  
P321 - Specific treatment (see supplemental first aid instruction on this label)  
P322 - Specific treatment (see supplemental first aid instruction on this label)

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P330 - Rinse mouth.  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

PBT: not relevant – no registration required

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
100% METHANOL UNLABELED	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	99.9959	F; R11 T; R39/23/24/25 Xi; R36/38
SODIUM HYDROXIDE UNLABELED	(CAS-No.) 1310-73-2 (Unlabeled) (EC-No.) 215-185-5 (Unlabeled) (EC Index-No.) 011-002-00-6 (Unlabeled)	0.00108	C; R35 Xi; R41 R52
1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-93-8 (Unlabeled) (EC Index-No.)	0.00014	Xn; R22 C; R35
PERFLUOROBUTANESULFONATE, POTASSIUM SALT (13C4, 99%)	(CAS-No.) 29420-49-3 (Unlabeled) (EC-No.) 249-61-3 (Unlabeled)	0.00014	Xi; R36/37/38
POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%)	(CAS-No.) 3871-99-6 (Unlabeled) (EC-No.) 223-393-2 (Unlabeled) (EC Index-No.)	0.00014	Xi; R36/37/38
PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%)	(CAS-No.) 307-24-4 (Unlabeled) (EC-No.) 206-196-6 (Unlabeled)	0.00014	C; R35 R67 Xi; R41
PERFLUOROBUTYRIC ACID, SODIUM SALT (2,3,4-13C3, 99%)	(CAS-No.) 2218-54-4 (Unlabeled) (EC Index-No.)	0.00014	Xi; R36/37/38
PERFLUOROPENTANOIC ACID, SODIUM SALT (PENTANOYL-13C5, 99%)	(CAS-No.) 2706-89-0 (Unlabeled) (EC Index-No.)	0.00014	Xi; R36/37/38
1H,1H,2H,2H-PERFLUOROOCANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-94-9 (Unlabeled) (EC Index-No.)	0.00013	Xn; R22 C; R35
1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-96-1 (Unlabeled) (EC Index-No.)	0.00013	T; R25 Xn; R20 N; R51/53
1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 108026-35-3 (Unlabeled) (EC Index-No.)	0.00013	T; R25 Xn; R20 N; R51/53
N-ETHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-ETHYL-D5, 98%)	(CAS-No.) 2991-50-6 (Unlabeled)	0.00013	Xi; R36/37/38
N-METHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-METHYL-D3, 98%)	(CAS-No.) 2355-31-9 (Unlabeled) (EC Index-No.)	0.00013	Xi; R36/37/38
TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" (13C3, 99%)	(CAS-No.) 13252-13-6 (Unlabeled) (EC Index-No.)	0.00013	C; R35 Xi; R37
PERFLUOROOCANESULFONAMIDE (PFOSA) (13C8, 99%)	(CAS-No.) 754-91-6 (Unlabeled) (EC-No.) 212-046-0 (Unlabeled) (EC Index-No.)	0.00013	R53
SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%)	(CAS-No.) 4021-47-0 (Unlabeled)	0.00013	T; R23/25 Xn; R22 C; R34
PERFLUOROUNDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP substance listed as REACH Candidate (Henicosfluoroundecanoic acid)	(CAS-No.) 60871-96-7 (Unlabeled) (EC-No.) 218-165-4	0.00013	Xn; R20/21/22 Xi; R36/38

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PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%)	(CAS-No.) 1350614-84-4 (EC-No.) 206-397-9 (Unlabeled)	0.00013	Carc.Cat.3; R40 Repr.Cat.1; R60 Repr.Cat.1; R61 Repr.Cat.3; R62 Repr.Cat.3; R63 Xn; R20/22 Xi; R41 R48
PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY	(CAS-No.) 375-95-1 (Unlabeled) (EC-No.) 206-801-3 (Unlabeled)	0.00013	Xi; R36/37/38
PERFLUORODECANOIC ACID (13C9, 99%)	(CAS-No.) 335-76-2 (Unlabeled) (EC-No.) 206-400-3 (Unlabeled)	0.00013	T; R25 Xi; R36/37/38
PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%)	(CAS-No.) 307-67-5 (Unlabeled) (EC-No.) 206-203-2 (Unlabeled)	0.00013	Xi; R36/37/38
PERFLUOROHEPTANOIC ACID, SODIUM SALT (HEPTANOYL-13C7, 99%)	(CAS-No.) 20109-59-5 (Unlabeled)	0.00013	Xi; R36/37/38
PERFLUOROTETRADECANOIC ACID (13C2, 99%) substance listed as REACH Candidate (Heptacosafuorotetradecanoic acid)	(CAS-No.) 376-06-7 (EC-No.) 206-803-4 (EC Index-No.)	0.00013	Not classified
PERFLUOROHEXADECANOIC ACID (13C2, 99%)	(CAS-No.) 67905-19-5 (EC-No.) 267-638-1 (EC Index-No.)	0.00013	C; R35 Xi; R41
N-METHYLPERFLUOROOCETANESULFONAMIDE (D3, 98%)	(CAS-No.) 31506-32-8 (Unlabeled) (EC-No.) 250-665-8 (Unlabeled) (EC Index-No.)	0.00013	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
100% METHANOL UNLABELED	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	99.9959	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 1, H370
SODIUM HYDROXIDE UNLABELED	(CAS-No.) 1310-73-2 (Unlabeled) (EC-No.) 215-185-5 (Unlabeled) (EC Index-No.) 011-002-00-6 (Unlabeled)	0.00108	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318
1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-93-8 (Unlabeled) (EC Index-No.)	0.00014	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
PERFLUOROBUTANESULFONATE, POTASSIUM SALT (13C4, 99%)	(CAS-No.) 29420-49-3 (Unlabeled) (EC-No.) 249-61-3 (Unlabeled)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336
POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%)	(CAS-No.) 3871-99-6 (Unlabeled) (EC-No.) 223-393-2 (Unlabeled) (EC Index-No.)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%)	(CAS-No.) 307-24-4 (Unlabeled) (EC-No.) 206-196-6 (Unlabeled)	0.00014	Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H336
PERFLUOROBUTYRIC ACID, SODIUM SALT (2,3,4-13C3, 99%)	(CAS-No.) 2218-54-4 (Unlabeled) (EC Index-No.)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROPENTANOIC ACID, SODIUM SALT (PENTANOYL-13C5, 99%)	(CAS-No.) 2706-89-0 (Unlabeled) (EC Index-No.)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
1H,1H,2H,2H-PERFLUOROOCETANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-94-9 (Unlabeled) (EC Index-No.)	0.00013	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-96-1 (Unlabeled) (EC Index-No.)	0.00013	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 2, H411
1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 108026-35-3 (Unlabeled) (EC Index-No.)	0.00013	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 2, H411
N-ETHYLPERFLUOROOCETANESULFONAMIDOACETIC ACID (N-ETHYL-D5, 98%)	(CAS-No.) 2991-50-6 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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N-METHYLPERFLUOROOCETANESULFONAMIDOACETIC ACID (N-METHYL-D3, 98%)	(CAS-No.) 2355-31-9 (Unlabeled) (EC Index-No.)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" (13C3, 99%)	(CAS-No.) 13252-13-6 (Unlabeled) (EC Index-No.)	0.00013	Skin Corr. 1, H314 STOT SE 3, H335
PERFLUOROOCETANESULFONAMIDE (PFOSA) (13C8, 99%)	(CAS-No.) 754-91-6 (Unlabeled) (EC-No.) 212-046-0 (Unlabeled) (EC Index-No.)	0.00013	Aquatic Chronic 4, H413
SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%)	(CAS-No.) 4021-47-0 (Unlabeled)	0.00013	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
PERFLUOROUNDDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP substance listed as REACH Candidate (Henicosfluoroundecanoic acid)	(CAS-No.) 60871-96-7 (Unlabeled) (EC-No.) 218-165-4	0.00013	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%)	(CAS-No.) 1350614-84-4 (EC-No.) 206-397-9 (Unlabeled)	0.00013	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Carc. 2, H351 Lact., H362 Repr. 1A, H360 STOT RE 1, H372
PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY	(CAS-No.) 375-95-1 (Unlabeled) (EC-No.) 206-801-3 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336
PERFLUORODECANOIC ACID (13C9, 99%)	(CAS-No.) 335-76-2 (Unlabeled) (EC-No.) 206-400-3 (Unlabeled)	0.00013	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336
PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%)	(CAS-No.) 307-67-5 (Unlabeled) (EC-No.) 206-203-2 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10)
PERFLUOROHEPTANOIC ACID, SODIUM SALT (HEPTANOYL-13C7, 99%)	(CAS-No.) 20109-59-5 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROTETRADECANOIC ACID (13C2, 99%) substance listed as REACH Candidate (Heptacosfluorotetradecanoic acid)	(CAS-No.) 376-06-7 (EC-No.) 206-803-4 (EC Index-No.)	0.00013	Not classified
PERFLUOROHEXADECANOIC ACID (13C2, 99%)	(CAS-No.) 67905-19-5 (EC-No.) 267-638-1 (EC Index-No.)	0.00013	Skin Corr. 1, H314 Eye Dam. 1, H318
N-METHYLPERFLUOROOCETANESULFONAMIDE (D3, 98%)	(CAS-No.) 31506-32-8 (Unlabeled) (EC-No.) 250-665-8 (Unlabeled) (EC Index-No.)	0.00013	Not classified

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100% METHANOL UNLABELED	(CAS-No.) 67-56-1	99.9959	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 1, H370
SODIUM HYDROXIDE UNLABELED	(CAS-No.) 1310-73-2 (Unlabeled)	0.00108	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-93-8 (Unlabeled)	0.00014	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
PERFLUOROBUTANESULFONATE, POTASSIUM SALT (13C4, 99%)	(CAS-No.) 29420-49-3 (Unlabeled)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%)	(CAS-No.) 3871-99-6 (Unlabeled)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%)	(CAS-No.) 307-24-4 (Unlabeled)	0.00014	Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H336
PERFLUOROBUTYRIC ACID, SODIUM SALT (2,3,4-13C3, 99%)	(CAS-No.) 2218-54-4 (Unlabeled)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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PERFLUOROPENTANOIC ACID, SODIUM SALT (PENTANOYL-13C5, 99%)	(CAS-No.) 2706-89-0 (Unlabeled)	0.00014	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
1H,1H,2H,2H-PERFLUOROOCANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-94-9 (Unlabeled)	0.00013	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 27619-96-1 (Unlabeled)	0.00013	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411
1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%)	(CAS-No.) 108026-35-3 (Unlabeled)	0.00013	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 2, H411
N-ETHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-ETHYL-D5, 98%)	(CAS-No.) 2991-50-6 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
N-METHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-METHYL-D3, 98%)	(CAS-No.) 2355-31-9 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" (13C3, 99%)	(CAS-No.) 13252-13-6 (Unlabeled)	0.00013	Skin Corr. 1A, H314 STOT SE 3, H335
PERFLUOROOCANESULFONAMIDE (PFOSA) (13C8, 99%)	(CAS-No.) 754-91-6 (Unlabeled)	0.00013	Aquatic Chronic 4, H413
SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%)	(CAS-No.) 4021-47-0 (Unlabeled)	0.00013	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Aquatic Acute 2, H401
PERFLUOROUNDDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP	(CAS-No.) 60871-96-7 (Unlabeled)	0.00013	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%)	(CAS-No.) 1350614-84-4	0.00013	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Carc. 2, H351 Lact., H362 Repr. 1A, H360 STOT RE 1, H372
PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY	(CAS-No.) 375-95-1 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
PERFLUORODECANOIC ACID (13C9, 99%)	(CAS-No.) 335-76-2 (Unlabeled)	0.00013	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%)	(CAS-No.) 307-67-5 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400
PERFLUOROHEPTANOIC ACID, SODIUM SALT (HEPTANOYL-13C7, 99%)	(CAS-No.) 20109-59-5 (Unlabeled)	0.00013	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROTETRADECANOIC ACID (13C2, 99%)	(CAS-No.) 376-06-7	0.00013	Not classified
PERFLUOROHEXADECANOIC ACID (13C2, 99%)	(CAS-No.) 67905-19-5	0.00013	Skin Corr. 1A, H314 Eye Dam. 1, H318
N-METHYLPERFLUOROOCANESULFONAMIDE (D3, 98%)	(CAS-No.) 31506-32-8 (Unlabeled)	0.00013	Not classified

Full text of R- and H- phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand. Call a physician immediately. Evacuate danger area.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Call a doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Take immediately victim to hospital. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Call a physician immediately.



# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

ES-5640

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system, Skin) (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: Toxic if inhaled.
Symptoms/effects after skin contact	: Toxic in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Dry sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Reactivity	: Vapors may form flammable mixture with air. Highly flammable liquid and vapor.

### 5.3. Advice for firefighters

Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Wear recommended personal protective equipment.
Other information	: Use water spray to cool exposed surfaces.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	: Wear respiratory protection. Do not breathe dust, mist, gas, spray, vapors, fume. Avoid contact with skin, eyes and clothing. Ventilate spillage area. Remove all sources of ignition. No open flames, no sparks, and no smoking. Ensure adequate air ventilation. Special attention should be given to low areas/pits where flammable vapors can accumulate.
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#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Dike and contain spill.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust, fume, gas, spray, vapors, mist. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
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# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

ES-5640

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Storage conditions : Store at room temperature away from light and moisture.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup> Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	325 mg/m <sup>3</sup> Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Potential for dermal absorption.
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup> Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	325 mg/m <sup>3</sup> Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (ppm)	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (Ceiling) (ppm)	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	Remark (OSHA)	The value in mg/m <sup>3</sup> is approximate. Skin notation.
SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))		
Italy - Portugal - USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> Upper Respiratory Tract irritation. Eye irritation. Skin irritation.
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> Upper Respiratory Tract irritation. Eye irritation. Skin irritation.
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> Upper Respiratory Tract irritation. Eye irritation. Skin irritation.
100% METHANOL UNLABELED (67-56-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.



# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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100% METHANOL UNLABELED (67-56-1)		
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup> Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	325 mg/m <sup>3</sup> Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Potential for dermal absorption.
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	260 mg/m <sup>3</sup> Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	325 mg/m <sup>3</sup> Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (ppm)	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (Ceiling) (ppm)	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	Remark (OSHA)	The value in mg/m <sup>3</sup> is approximate. Skin notation.

### PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

#### DNEL/DMEL (Workers)

Acute - systemic effects, dermal	40 mg/kg bodyweight/day
Acute - systemic effects, inhalation	260 mg/m <sup>3</sup>
Acute - local effects, dermal	260 mg/cm <sup>2</sup>
Long-term - systemic effects, dermal	40 mg/kg bodyweight/day
Long-term - local effects, dermal	260 mg/cm <sup>2</sup>
Long-term - local effects, inhalation	260 mg/m <sup>3</sup>

#### DNEL/DMEL (General population)

Acute - systemic effects, dermal	8 mg/kg body weight
Acute - systemic effects, inhalation	50 mg/m <sup>3</sup>
Acute - systemic effects, oral	8 mg/kg body weight
Acute - local effects, inhalation	50 mg/m <sup>3</sup>
Long-term - systemic effects, oral	8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	50 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day
Long-term - local effects, inhalation	50 mg/m <sup>3</sup>

#### PNEC (Water)

PNEC aqua (freshwater)	154 mg/l
PNEC aqua (marine water)	15.4 mg/l

#### PNEC (Sediment)

PNEC sediment (freshwater)	570.4 mg/kg dwt
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#### PNEC (Soil)

PNEC soil	23.5 mg/kg dwt
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#### PNEC (STP)

PNEC sewage treatment plant	100 mg/kg
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### 8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.  
Hand protection : Wear suitable protective clothing and gloves.  
Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.  
Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.  
Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.  
Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state : Liquid  
Appearance : Liquid  
Molecular mass : 32.04 g/mol  
Color : Colorless  
Odor : Pungent  
Odor threshold : No data available  
pH : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Melting point : -98 °C (-144 °F)  
Freezing point : No data available  
Boiling point : 64.7 °C (148.5 °F)  
Flash point : 9.7 °C (49.5 °F) - closed cup  
Auto-ignition temperature : 455 °C (851 °F) at 1,013 hPa (760 mmHg)  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapor pressure : 130.3 hPa (97.7 mmHg) at 20 °C (68 °F);  
169.27 hPa (126.96 mmHg) at 25 °C (77 °F)  
Vapor pressure at 50 °C : 546.6 hPa (410 mmHg) at 50 °C (122 °F)  
Relative vapor density at 20 °C : 1.11  
Relative density : No data available  
Specific gravity / density : 0.791 g/ml at 25 °C (77 °F)  
Solubility : Water: Completely miscible  
Log Pow : -0.77  
Log Kow : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Explosive properties : Product is not explosive.  
Oxidizing properties : Non oxidizing material according to EC criteria.  
Explosion limits : 6 - 36 % (V)

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Vapors may form flammable mixture with air. Highly flammable liquid and vapor.

### 10.2. Chemical stability

See storage and expiration date on CoA.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Acid anhydrides. Acid chlorides. Oxidizing agent. Alkali Metal Amides. Reducing agents. Acids.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.

PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
LD50 oral rat	1187 - 2769 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 inhalation rat (mg/l)	128.2 mg/l/4h ; 87.6 mg/l - 6 h
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	128.200 mg/l/4h
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-93-8 (Unlabeled))	
ATE CLP (oral)	500.000 mg/kg body weight
1H,1H,2H,2H-PERFLUOROOCANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-94-9 (Unlabeled))	
ATE CLP (oral)	500.000 mg/kg body weight
1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-96-1 (Unlabeled))	
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h
1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (108026-35-3 (Unlabeled))	
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h
PERFLUOROOCANESULFONAMIDE (PFOSA) (13C8, 99%) (754-91-6 (Unlabeled))	
LD50 oral rat	> 172 mg/kg
SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%) (4021-47-0 (Unlabeled))	
ATE CLP (oral)	500.000 mg/kg body weight
PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%) (1350614-84-4)	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h
Additional information	LD50 Intraperitoneal - Rat - 189 mg/kg
PERFLUORODECANOIC ACID (13C9, 99%) (335-76-2 (Unlabeled))	
LD50 oral rat	57 mg/kg
ATE CLP (oral)	57.000 mg/kg body weight
PERFLUOROUNDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP (60871-96-7 (Unlabeled))	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h
100% METHANOL UNLABELED (67-56-1)	
LD50 oral rat	1187 - 2769 mg/kg
LD50 dermal rabbit	17100 mg/kg

# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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100% METHANOL UNLABELED (67-56-1)	
LC50 inhalation rat (mg/l)	128.2 mg/l/4h ; 87.6 mg/l - 6 h
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	128.200 mg/l/4h
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin corrosion/irritation	: Skin - Rabbit - Result: No skin irritation
Serious eye damage/irritation	: Eyes - Rabbit - Result: No eye irritation
Respiratory or skin sensitization	: Maximisation Test - Guinea pig - Did not cause sensitization. (OECD 406 method)
Germ cell mutagenicity	: AMES test : S. typhimurium. Result: Negative - Fibroblast - Result: Negative. Mutation in mammalian somatic cells. Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) - Mouse - Male and female - Result: Negative. Mouse - Male and female. Result: Negative
Carcinogenicity	: Not classified
Reproductive toxicity	: Damage to fetus not classifiable. Fertility classification not possible from current data.
Specific target organ toxicity – single exposure	: Causes damage to organs through prolonged or repeated exposure
Specific target organ toxicity – repeated exposure	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans. stomach.
Symptoms/effects after inhalation	: Toxic if inhaled.
Symptoms/effects after skin contact	: Toxic in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
LC50 fish 1	15400 mg/l mortality LC50 - Lepomis macrochirus (Bluegill) - 96 h
EC50 Daphnia 1	> 10000 mg/l Daphnia magna (Water flea) - 48 h
EC50 Daphnia 2	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h

PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%) (307-67-5 (Unlabeled))	
EC50 other aquatic organisms 1	0.0792 mg/l Daphnia magna (Water flea) - 48h

SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))	
LC50 fish 1	125 mg/l Gambusia affinis (Mosquito fish) - 96 h
EC50 Daphnia 1	40.38 mg/l Daphnia (water flea) - 48 h - Immobilization
LC50 fish 2	45.4 mg/kg Oncorhynchus mykiss (rainbow trout) - 96 h

100% METHANOL UNLABELED (67-56-1)	
LC50 fish 1	15400 mg/l mortality LC50 - Lepomis macrochirus (Bluegill) - 96 h
EC50 Daphnia 1	> 10000 mg/l Daphnia magna (Water flea) - 48 h
EC50 Daphnia 2	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h

### 12.2. Persistence and degradability

PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
Biochemical oxygen demand (BOD)	600 - 1200 mg/g
Chemical oxygen demand (COD)	1420 mg/g

# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
ThOD	1500 mg/g
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d

PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%) (307-24-4 (Unlabeled))	
Persistence and degradability	May cause long-term adverse effects in the environment.

SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

100% METHANOL UNLABELED (67-56-1)	
Biochemical oxygen demand (BOD)	600 - 1200 mg/g
Chemical oxygen demand (COD)	1420 mg/g
ThOD	1500 mg/g
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d

### 12.3. Bioaccumulative potential

PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
BCF fish 1	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Log Pow	-0.77

PERFLUOROOCETANESULFONAMIDE (PFOSA) (13C8, 99%) (754-91-6 (Unlabeled))	
Log Pow	5.8

100% METHANOL UNLABELED (67-56-1)	
BCF fish 1	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Log Pow	-0.77

### 12.4. Mobility in soil

PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
Ecology - soil	Not degradable in the soil.

100% METHANOL UNLABELED (67-56-1)	
Ecology - soil	Not degradable in the soil.

### 12.5. Results of PBT and vPvB assessment

PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH	
PBT: not relevant – no registration required	

PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%) (307-24-4 (Unlabeled))	
PBT: not relevant – no registration required	

PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY (375-95-1 (Unlabeled))	
PBT: not relevant – no registration required	

PERFLUOROUNDDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP (60871-96-7 (Unlabeled))	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII	
This substance/mixture meets the vPvB criteria of REACH, annex XIII	

100% METHANOL UNLABELED (67-56-1)	
PBT: not relevant – no registration required	

PERFLUOROTETRADECANOIC ACID (13C2, 99%) (376-06-7)	
This substance/mixture does not meet the PBT criteria of REACH, annex XIII	
This substance/mixture meets the vPvB criteria of REACH, annex XIII	

### 12.6. Other adverse effects

Other adverse effects	: Avoid release to the environment.
Other information	: Stability in water: at 19 °C - (83 - 91%) - 72 h. Remarks: Hydrolyses on contact with water. Hydrolyses readily.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

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Ecology - waste materials : Dispose of as unused product.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No.(DOT) : 1230  
DOT NA no. UN1230

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol  
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Hazard labels (DOT) : 3 - Flammable liquid  
6.1 - Poison



DOT Symbols : + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group, I - Proper shipping name appropriate for international and domestic transportation

Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

#### 14.3. Additional information

Emergency Response Guide (ERG) Number : 131

Other information : No supplementary information available.

#### Overland transport

Hazard identification number (Kemler No.) : 336

Orange plates :



Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) : 1I

Excepted quantities (ADR) : E2

#### Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

MFAG-No : 131



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### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 1 L  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L  
CFR 175.75)

Civil Aeronautics Law : Flammable liquids

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ 5000 lb

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 311/312 Hazard Classes Fire hazard  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

SARA Section 313 - Emission Reporting Subject to reporting requirements of United States SARA Section 313

#### 1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-93-8 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### 1H,1H,2H,2H-PERFLUOROOCANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-94-9 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-96-1 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### 1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (108026-35-3 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### N-ETHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-ETHYL-D5, 98%) (2991-50-6 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### N-METHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-METHYL-D3, 98%) (2355-31-9 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### TETRAFLURO-2-(HEPTAFLUROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" (13C3, 99%) (13252-13-6 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

SARA Section 313 - Emission Reporting Not subject to reporting requirements of the United States SARA Section 313.

#### PERFLUROOCANESULFONAMIDE (PFOSA) (13C8, 99%) (754-91-6 (Unlabeled))

SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302.

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<b>PERFLUOROOCETANESULFONAMIDE (PFOSA) (13C8, 99%) (754-91-6 (Unlabeled))</b>	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUOROBUTANESULFONATE, POTASSIUM SALT (13C4, 99%) (29420-49-3 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%) (3871-99-6 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%) (4021-47-0 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>PERFLUOROBUTYRIC ACID, SODIUM SALT (2,3,4-13C3, 99%) (2218-54-4 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUOROPENTANOIC ACID, SODIUM SALT (PENTANOYL-13C5, 99%) (2706-89-0 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUOROHXANOIC ACID, SODIUM SALT (13C6, 99%) (307-24-4 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUOROHEPTANOIC ACID, SODIUM SALT (HEPTANOYL-13C7, 99%) (20109-59-5 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%) (1350614-84-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY (375-95-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>PERFLUORODECANOIC ACID (13C9, 99%) (335-76-2 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUOROUNDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP (60871-96-7 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%) (307-67-5 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302

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<b>PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%) (307-67-5 (Unlabeled))</b>	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>100% METHANOL UNLABELED (67-56-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
<b>PERFLUOROTETRADECANOIC ACID (13C2, 99%) (376-06-7)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>PERFLUOROHEXADECANOIC ACID (13C2, 99%) (67905-19-5)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>N-METHYLPERFLUOROOCANESULFONAMIDE (D3, 98%) (31506-32-8 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

## 15.2. International regulations

### CANADA

<b>PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>100% METHANOL UNLABELED (67-56-1)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>PERFLUOROHEXADECANOIC ACID (13C2, 99%) (67905-19-5)</b>	

### 15.2.1. National regulations

<b>PERFLUOROHEXADECANOIC ACID (13C2, 99%) (67905-19-5)</b>	
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)	

## 15.3. US State regulations

<b>PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH()</b>	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

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<b>1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-93-8 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1H,1H,2H,2H-PERFLUOROOCANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-94-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-96-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (108026-35-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>N-ETHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-ETHYL-D5, 98%) (2991-50-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>N-METHYLPERFLUOROOCANESULFONAMIDOACETIC ACID (N-METHYL-D3, 98%) (2355-31-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" (13C3, 99%) (13252-13-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROOCANESULFONAMIDE (PFOSA) (13C8, 99%) (754-91-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROBUTANESULFONATE, POTASSIUM SALT (13C4, 99%) (29420-49-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%) (3871-99-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

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<b>POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%) (3871-99-6 (Unlabeled))</b>				
		Female	Male	
No	No	No	No	
<b>SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%) (4021-47-0 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROBUTYRIC ACID, SODIUM SALT (2,3,4-13C3, 99%) (2218-54-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROPENTANOIC ACID, SODIUM SALT (PENTANOYL-13C5, 99%) (2706-89-0 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%) (307-24-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROHEPTANOIC ACID, SODIUM SALT (HEPTANOYL-13C7, 99%) (20109-59-5 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%) (1350614-84-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	Yes	Yes	
<b>PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY (375-95-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUORODECANOIC ACID (13C9, 99%) (335-76-2 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROUNDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP (60871-96-7 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)



# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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<b>PERFLUOROUNDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP (60871-96-7 (Unlabeled))</b>				
No	No	No	No	
<b>PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%) (307-67-5 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>100% METHANOL UNLABELED (67-56-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
<b>PERFLUOROTETRADECANOIC ACID (13C2, 99%) (376-06-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>PERFLUOROHEXADECANOIC ACID (13C2, 99%) (67905-19-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>N-METHYLPERFLUOROOCETANESULFONAMIDE (D3, 98%) (31506-32-8 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1H,1H,2H,2H-PERFLUOROHEXANE SULFONATE (4:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-93-8 (Unlabeled))</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1H,1H,2H,2H-PERFLUOROOCETANE SULFONATE (6:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-94-9 (Unlabeled))</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (27619-96-1 (Unlabeled))</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1H,1H,2H,2H-PERFLUORODODECANE SULFONATE(10:2 FTS), SODIUM SALT (1,2-13C2, 99%; 1,1,2,2-D4, 98%) (108026-35-3 (Unlabeled))</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				



# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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<b>N-ETHYLPERFLUOROOCETANESULFONAMIDOACETIC ACID (N-ETHYL-D5, 98%) (2991-50-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>N-METHYLPERFLUOROOCETANESULFONAMIDOACETIC ACID (N-METHYL-D3, 98%) (2355-31-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" (13C3, 99%) (13252-13-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROOCETANESULFONAMIDE (PFOSA) (13C8, 99%) (754-91-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROBUTANESULFONATE, POTASSIUM SALT (13C4, 99%) (29420-49-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>POTASSIUM PERFLUORO-1-HEXANESULFONATE (13C6, 99%) (3871-99-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>SODIUM PERFLUORO-1-OCTANESULFONATE (PFOS) (13C8, 99%) (4021-47-0 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>PERFLUOROBUTYRIC ACID, SODIUM SALT (2,3,4-13C3, 99%) (2218-54-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROPENTANOIC ACID, SODIUM SALT (PENTANOYL-13C5, 99%) (2706-89-0 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROHEXANOIC ACID, SODIUM SALT (13C6, 99%) (307-24-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROHEPTANOIC ACID, SODIUM SALT (HEPTANOYL-13C7, 99%) (20109-59-5 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUORO-N-OCTANOIC ACID (PFOA) (13C8, 99%) (1350614-84-4)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY (375-95-1 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List

# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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<b>PERFLUORONONANOIC ACID (PFNA) (13C9, 99%) 97% CHEMICAL PURITY (375-95-1 (Unlabeled))</b>
U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUORODECANOIC ACID (13C9, 99%) (335-76-2 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROUNDECANOIC ACID, SODIUM SALT (3,4,5,6,7,8,9,10,11-13C9, 99%) 90% CP (60871-96-7 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUORODODECANOIC ACID, SODIUM SALT (DODECANOYL-13C12, 99%) (307-67-5 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>100% METHANOL UNLABELED (67-56-1)</b>
<b>State or local regulations</b>
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
<b>PERFLUOROTETRADECANOIC ACID (13C2, 99%) (376-06-7)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>PERFLUOROHEXADECANOIC ACID (13C2, 99%) (67905-19-5)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>N-METHYLPERFLUOROCTANESULFONAMIDE (D3, 98%) (31506-32-8 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4

# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

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Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Lact.	Reproductive toxicity (Lact.)
Met. Corr. 1	Corrosive to metals Category 1
Repr. 1A	Reproductive toxicity Category 1A
Skin Corr. 1	Skin corrosion/irritation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H362	May cause harm to breast-fed children
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R11	Highly flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R23/25	Toxic by inhalation and if swallowed
R25	Toxic if swallowed
R34	Causes burns
R35	Causes severe burns
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R37	Irritating to respiratory system
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
R48	Danger of serious damage to health by prolonged exposure
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52	Harmful to aquatic organisms
R53	May cause long-term adverse effects in the aquatic environment
R60	May impair fertility
R61	May cause harm to the unborn child
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child

# PFAS SIL SUPERFUND MIXTURE 1 (LABELED), IN METHANOL W/4 MOLAR EQUIVALENTS NAOH

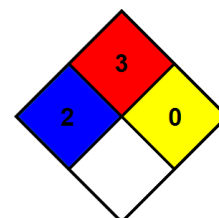
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R67	Vapors may cause drowsiness and dizziness
C	Corrosive
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 3 Serious Hazard
- Physical : 0 Minimal Hazard

### CIL Mixture SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*