METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 9/21/2020 Revision date: 7/27/2023 Supersedes: 11/17/2020 Version: 2.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)
Product code : ES-5631
Other means of identification : Also applicable to:
ES-5631-A IN METHANOL(W/4 MOLAR EQUIV. NAOH)

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Cambridge Isotope Laboratories, Inc.
50 Frontage Rd
01810
ANDOVER, MA, 01810
USA
T 1-800-322-1174
cilsales@isotope.com - www.isotope.com

1.4. Emergency telephone number

Emergency number : 1-703-741-5970
Chemtrec 1-800-424-9300 24 hours

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 3	H301	Toxic if swallowed
Acute toxicity (dermal) Category 3	H311	Toxic in contact with skin
Acute toxicity (inhalation:vapor) Category 3	H331	Toxic if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity (single exposure) Category 1	H370	Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

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 (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral)
Precautionary statements (GHS US)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. heat, open flames, sparks P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof electrical, lighting, ventilating equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P260 - Do not breathe dust, fume, mist, gas, spray, vapors. P261 - Avoid breathing dust, fume, gas, spray, vapors, mist. 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 clothing, protective gloves. P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER. 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 doctor, a POISON CENTER. P312 - Call a doctor, a POISON CENTER if you feel unwell. P321 - Specific treatment (see Hazardous component(s) for labeling on this label). P322 - Specific treatment (see Hazard pictograms (CLP) on this label) 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 alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder 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 which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
100% METHANOL UNLABELED	CAS-No.: 67-56-1	99.99372	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)	0.00158	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
PERFLUOROBUTANESULFONATE, POTASSIUM SALT UNLABELED	CAS-No.: 29420-49-3	0.00029	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%)	CAS-No.: 3871-99-6	0.00028	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
PERFLUOROHEXANOIC ACID, SODIUM SALT UNLABELED	CAS-No.: 2923-26-4	0.00027	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONICACID (11CL-PF3OUDS) (F53BMIN) K SALT UNLABELED	CAS-No.: 83329-89-9	0.00027	Not classified
9-CHLOROHEXADECAFLUORO-3-OXANONE-1-SULFONIC ACID, POTASSIUM SALT (9CL-PF3ONS) UNLABELED	CAS-No.: 73606-19-6	0.00027	Acute Tox. 4 (Dermal), H312 Eye Irrit. 2A, H319
DODECAFLUORO-3H-4,8-DIOXANONANOIC ACID,SODIUM SALT (NaDONA) UNLABELED	CAS-No.: 2250081-67-3	0.00027	Met. Corr. 1, H290 Skin Corr. 1A, H314
PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED	CAS-No.: 3830-45-3	0.00026	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROUNDECANOIC ACID, SODIUM SALT UNLABELED	CAS-No.: 60871-96-7	0.00026	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
PERFLUORODODECANOIC ACID, SODIUM SALT UNLABELED	CAS-No.: 307-67-5	0.00026	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
PERFLUOROHEPTANOIC ACID UNLABELED	CAS-No.: 375-85-9 (Unlabeled)	0.00025	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Name	Product identifier	%	GHS US classification
PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED	CAS-No.: 335-67-1	0.00025	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
PERFLUORONONANOIC ACID UNLABELED	CAS-No.: 375-95-1 (Unlabeled)	0.00025	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336
PERFLUOROTRIDECANOIC ACID UNLABELED (97% CHEMICAL PURITY)	CAS-No.: 72629-94-8	0.00025	Not classified
PERFLUOROTETRADECANOIC ACID UNLABELED (96% CHEMICAL PURITY)	CAS-No.: 376-06-7	0.00025	Not classified
PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED	CAS-No.: 1763-23-1	0.00025	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Carc. 2, H351 Lact., H362 Repr. 1A, H360 STOT RE 1, H372 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS)	CAS-No.: 2991-50-6	0.00025	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED -	CAS-No.: 2355-31-9	0.00025	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" UNLABELED	CAS-No.: 13252-13-6	0.00025	Skin Corr. 1A, H314 STOT SE 3, H335

Full text of hazard classes and H-statements : 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.

4.2. Most important symptoms and effects (acute and delayed)

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	:	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. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

Fire hazard	:	Highly flammable liquid and vapor.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

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.

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".

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. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

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.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
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.
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.
USA - ACGIH - Biological Exposure Indices	
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)
Remark	End of shift (As soon as possible after exposure ceases)

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	260 mg/m³ 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)
OSHA PEL TWA [2]	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)
OSHA PEL STEL [1]	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
OSHA PEL STEL [2]	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)
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits
Remark (NIOSH)	Potential for dermal absorption.

100% METHANOL UNLABELED (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	200 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
ACGIH OEL STEL [ppm]	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
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.
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.
USA - ACGIH - Biological Exposure Indices	
BEI	15 mg/l Urine Basis: ACGIH - Biological Exposure Indices (BEI)
Remark	End of shift (As soon as possible after exposure ceases)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	260 mg/m³ 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)
OSHA PEL TWA [2]	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)
OSHA PEL STEL [1]	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)

100% METHANOL UNLABELED (67-56-1)	
OSHA PEL STEL [2]	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)
OSHA PEL C [ppm]	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	260 mg/m³ Basis: NIOSH Recommended Exposure Limits
NIOSH REL TWA [ppm]	200 ppm Basis: NIOSH Recommended Exposure Limits
NIOSH REL STEL	325 mg/m³ Basis: NIOSH Recommended Exposure Limits
NIOSH REL STEL [ppm]	250 ppm Basis: NIOSH Recommended Exposure Limits
Remark (NIOSH)	Potential for dermal absorption.

PERFLUOROHEXANOIC ACID, SODIUM SALT UNLABELED (2923-26-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.

PERFLUOROHEPTANOIC ACID UNLABELED (375-85-9 (Unlabeled))	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.

PERFLUORONONANOIC ACID UNLABELED (375-95-1 (Unlabeled))	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.

PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED (3830-45-3)
No additional information available

PERFLUOROUNDECANOIC ACID, SODIUM SALT UNLABELED (60871-96-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.

PERFLUORODODECANOIC ACID, SODIUM SALT UNLABELED (307-67-5)
No additional information available

PERFLUOROTRIDECANOIC ACID UNLABELED (97% CHEMICAL PURITY) (72629-94-8)
No additional information available

PERFLUOROTETRADECANOIC ACID UNLABELED (96% CHEMICAL PURITY) (376-06-7)	
No additional information available	

PERFLUOROBUTANESULFONATE, POTASSIUM SALT UNLABELED (29420-49-3)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.

POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%) (3871-99-6)	
No additional information available	

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)	
No additional information available	

N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS) (2991-50-6)	
No additional information available	

N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED - (2355-31-9)	
No additional information available	

TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" UNLABELED (13252-13-6)	
No additional information available	

11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONICACID (11CL-PF3OUDS) (F53BMIN) K SALT UNLABELED (83329-89-9)	
No additional information available	

9-CHLOROHEXADECAFLUORO-3-OXANONE-1-SULFONIC ACID, POTASSIUM SALT (9CL-PF3ONS) UNLABELED (73606-19-6)	
No additional information available	

DODECAFLUORO-3H-4,8-DIOXANONANOIC ACID,SODIUM SALT (NaDONA) UNLABELED (2250081-67-3)	
No additional information available	

SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL C	2 mg/m³ Upper Respiratory Tract irritation. Eye irritation. Skin irritation.
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	2 mg/m³ Upper Respiratory Tract irritation. Eye irritation. Skin irritation.
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL C	2 mg/m³ Upper Respiratory Tract irritation. Eye irritation. Skin irritation.

8.2. Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

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

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Color	:	Colorless
Odor	:	Pungent
Odor threshold	:	No data available
pH	:	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
Relative evaporation rate (butyl acetate=1)	:	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
Density	:	0.791 g/ml at 25 °C (77 °F)
Molecular mass	:	32.04 g/mol
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	-0.77
Auto-ignition temperature	:	455 °C (851 °F) at 1,013 hPa (760 mmHg)
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosion limits	:	6 – 36 % (V)
Explosive properties	:	Product is not explosive.
Oxidizing properties	:	Non oxidizing material according to EC criteria.

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.

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, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Toxic if swallowed.
Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Toxic if inhaled.

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
LD50 oral rat	1187 – 2769 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	128.2 mg/l/4h
Additional data	LDLO, oral, human: 143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

100% METHANOL UNLABELED (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 Inhalation - Rat	128.2 mg/l/4h ; 87.6 mg/l - 6 h

100% METHANOL UNLABELED (67-56-1)	
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	128.2 mg/l/4h
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

PERFLUOROHEPTANOIC ACID UNLABELED (375-85-9 (Unlabeled))	
ATE US (oral)	500 mg/kg body weight

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)	
ATE US (oral)	500 mg/kg body weight

PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED (3830-45-3)	
ATE US (oral)	500 mg/kg body weight

PERFLUOROUNDECANOIC ACID, SODIUM SALT UNLABELED (60871-96-7)	
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)	
LD50 oral rat	154 mg/kg
ATE US (oral)	500 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Additional information	intraperitoneal Rat 100 mg/kg. Oral Rabbit: 77.5 mg/kg (1-31 D preg) Oral rat 19 mg/kg (2-20 D preg). Oral mouse 300 mg/kg (2-21 D preg)

9-CHLOROHEXADECAFLUORO-3-OXANONE-1-SULFONIC ACID, POTASSIUM SALT (9CL-PF3ONS) UNLABELED (73606-19-6)	
ATE US (dermal)	1100 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)	
pH	2.6 at 1g/l

SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))	
pH	14 at 50 g/l at 20 °C (68 °F)

Serious eye damage/irritation : Causes serious eye irritation.

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)	
pH	2.6 at 1g/l

SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))	
pH	14 at 50 g/l at 20 °C (68 °F)

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
National Toxicology Program (NTP) Status	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.

100% METHANOL UNLABELED (67-56-1)	
National Toxicology Program (NTP) Status	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible, or confirmed human carcinogen by IARC.

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).

100% METHANOL UNLABELED (67-56-1)	
STOT-single exposure	Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal, Inhalation, oral).

PERFLUOROHEXANOIC ACID, SODIUM SALT UNLABELED (2923-26-4)	
STOT-single exposure	May cause respiratory irritation.

PERFLUORONONANOIC ACID UNLABELED (375-95-1 (Unlabeled))	
STOT-single exposure	May cause drowsiness or dizziness.

PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED (3830-45-3)	
STOT-single exposure	May cause respiratory irritation.

PERFLUORODODECANOIC ACID, SODIUM SALT UNLABELED (307-67-5)	
STOT-single exposure	May cause respiratory irritation.

PERFLUOROBUTANESULFONATE, POTASSIUM SALT UNLABELED (29420-49-3)	
STOT-single exposure	May cause drowsiness or dizziness.

POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%) (3871-99-6)	
STOT-single exposure	May cause respiratory irritation.

N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS) (2991-50-6)	
STOT-single exposure	May cause respiratory irritation.

N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED - (2355-31-9)	
STOT-single exposure	May cause respiratory irritation.

TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" UNLABELED (13252-13-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

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 : 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.

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.

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h
EC50 - Crustacea [2]	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h

100% METHANOL UNLABELED (67-56-1)	
LC50 - Fish [1]	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - 48 h
EC50 - Crustacea [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 UNLABELED (307-67-5)	
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 - Crustacea [1]	40.38 mg/l Daphnia (water flea) - 48 h - Immobilization
LC50 - Fish [2]	45.4 mg/kg Oncorhynchus mykiss (rainbow trout) - 96 h

12.2. Persistence and degradability

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
Biochemical oxygen demand (BOD)	600 – 1200 mg/g
Chemical oxygen demand (COD)	1420 mg/g

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
ThOD	1500 mg/g
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d

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

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

12.3. Bioaccumulative potential

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
BCF - Fish [1]	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Partition coefficient n-octanol/water (Log Pow)	-0.77

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
Partition coefficient n-octanol/water (Log Pow)	-0.77

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)	
BCF - Fish [1]	56

12.4. Mobility in soil

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
Ecology - soil	Not degradable in the soil.

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

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	10 x 10^5

12.5. 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. Disposal 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.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1230

UN-No. (TDG) : UN1230

UN-No. (IMDG) : 1230

UN-No. (IATA) : 1230

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol

Proper Shipping Name (TDG) : METHANOL

Proper Shipping Name (IMDG) : METHANOL

Proper Shipping Name (IATA) : Methanol

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3 (6.1)

Hazard labels (DOT) : 3, 6.1

TDG

Transport hazard class(es) (TDG) : 3 (6.1)

Hazard labels (TDG) : 3, 6.1

IMDG

Transport hazard class(es) (IMDG) : 3 (6.1)

Hazard labels (IMDG) : 3, 6.1

IATA

Transport hazard class(es) (IATA) : 3 (6.1)

Hazard labels (IATA) : 3, 6.1

14.4. Packing group

Packing group (DOT) : II

Packing group (TDG) : II

Packing group (IMDG) : II

Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1230

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

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

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

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’’

TDG

UN-No. (TDG) : UN1230

TDG Special Provisions : 43 - Despite section 2.1 of Part 2 (Classification), these dangerous goods are assigned to this classification based on human experience.

Explosive Limit and Limited Quantity Index : 1 L

Excepted quantities (TDG) : E2

Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 1 L

Emergency Response Guide (ERG) Number : 131

IMDG

Special provision (IMDG)	:	279
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	:	B
Stowage and handling (IMDG)	:	SW2
Flash point (IMDG)	:	12°C c.c.
Properties and observations (IMDG)	:	Colourless, volatile liquid. Flashpoint: 12°C c.c. Explosive limits: 6% to 36.5% Miscible with water.Toxic if swallowed; may cause blindness. Avoid skin contact.
MFAG-No	:	131

IATA

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	352
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
Special provision (IATA)	:	A113
ERG code (IATA)	:	3L

14.7. 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

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
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

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
100% METHANOL UNLABELED	67-56-1	Present	Active	
PERFLUOROHEXANOIC ACID, SODIUM SALT UNLABELED	2923-26-4	Present	Inactive	
PERFLUOROHEPTANOIC ACID UNLABELED	375-85-9 (Unlabeled)	Not present	-	

Name	CAS-No.	Listing	Commercial status	Flags
PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED	335-67-1	Present	Active	S;SP
PERFLUORONONANOIC ACID UNLABELED	375-95-1 (Unlabeled)	Not present	-	
PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED	3830-45-3	Not present	-	
PERFLUOROUNDECANOIC ACID, SODIUM SALT UNLABELED	60871-96-7	Not present	-	
PERFLUORODODECANOIC ACID, SODIUM SALT UNLABELED	307-67-5	Not present	-	
PERFLUOROTRIDECANOIC ACID UNLABELED (97% CHEMICAL PURITY)	72629-94-8	Not present	-	
PERFLUOROTETRADECANOIC ACID UNLABELED (96% CHEMICAL PURITY)	376-06-7	Present	Active	S
PERFLUOROBUTANESULFONATE, POTASSIUM SALT UNLABELED	29420-49-3	Present	Active	
POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%)	3871-99-6	Not present	-	S
PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED	1763-23-1	Present	Active	S
N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS)	2991-50-6	Not present	-	
N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED -	2355-31-9	Not present	-	
TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" UNLABELED	13252-13-6	Present	Active	PMN;5E
11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONICACID (11CL-PF3OUDS) (F53BMIN) K SALT UNLABELED	83329-89-9	Not present	-	
9-CHLOROHEXADECAFLUORO-3-OXANONE-1-SULFONIC ACID, POTASSIUM SALT (9CL-PF3ONS) UNLABELED	73606-19-6	Not present	-	
DODECAFLUORO-3H-4,8-DIOXANONANOIC ACID,SODIUM SALT (NaDONA) UNLABELED	2250081-67-3	Not present	-	
SODIUM HYDROXIDE UNLABELED	1310-73-2 (Unlabeled)	Not present	-	

100% METHANOL UNLABELED (67-56-1)	
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

100% METHANOL UNLABELED (67-56-1)	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

PERFLUOROHEXANOIC ACID, SODIUM SALT UNLABELED (2923-26-4)	
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

PERFLUOROHEPTANOIC ACID UNLABELED (375-85-9 (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

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)	
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

PERFLUORONONANOIC ACID UNLABELED (375-95-1 (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

PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED (3830-45-3)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

PERFLUOROUNDECANOIC ACID, SODIUM SALT UNLABELED (60871-96-7)	
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

PERFLUORODODECANOIC ACID, SODIUM SALT UNLABELED (307-67-5)	
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

PERFLUOROTRIDECANOIC ACID UNLABELED (97% CHEMICAL PURITY) (72629-94-8)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

PERFLUOROTETRADECANOIC ACID UNLABELED (96% CHEMICAL PURITY) (376-06-7)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.

PERFLUOROBUTANESULFONATE, POTASSIUM SALT UNLABELED (29420-49-3)	
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

POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%) (3871-99-6)	
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

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)	
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

N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS) (2991-50-6)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED - (2355-31-9)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" UNLABELED (13252-13-6)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONICACID (11CL-PF3OUDS) (F53BMIN) K SALT UNLABELED (83329-89-9)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

9-CHLOROHEXADECAFLUORO-3-OXANONE-1-SULFONIC ACID, POTASSIUM SALT (9CL-PF3ONS) UNLABELED (73606-19-6)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

DODECAFLUORO-3H-4,8-DIOXANONANOIC ACID,SODIUM SALT (NaDONA) UNLABELED (2250081-67-3)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

SODIUM HYDROXIDE UNLABELED (1310-73-2 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302

15.2. International regulations

CANADA

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)
Listed on the Canadian DSL (Domestic Substances List)

100% METHANOL UNLABELED (67-56-1)
Listed on the Canadian DSL (Domestic Substances List)

PERFLUOROHEXANOIC ACID, SODIUM SALT UNLABELED (2923-26-4)
Listed on the Canadian NDSL (Non-Domestic Substances List)

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

PERFLUORODECANOIC ACID, SODIUM SALT UNLABELED (3830-45-3)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

PERFLUOROUNDECANOIC ACID, SODIUM SALT UNLABELED (60871-96-7)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

PERFLUORODODECANOIC ACID, SODIUM SALT UNLABELED (307-67-5)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

PERFLUOROTRIDECANOIC ACID UNLABELED (97% CHEMICAL PURITY) (72629-94-8)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

PERFLUOROTETRADECANOIC ACID UNLABELED (96% CHEMICAL PURITY) (376-06-7)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

PERFLUOROBUTANESULFONATE, POTASSIUM SALT UNLABELED (29420-49-3)
Listed on the Canadian DSL (Domestic Substances List)

POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%) (3871-99-6)

Listed on the Canadian DSL (Domestic Substances List)

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS) (2991-50-6)

Listed on the Canadian DSL (Domestic Substances List)

N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED - (2355-31-9)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

TETRAFLUORO-2-(HEPTAFLUOROPROPOXY)PROPANOIC ACID (HFPO-DA) "GENX" UNLABELED (13252-13-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONICACID (11CL-PF3OUDS) (F53BMIN) K SALT UNLABELED (83329-89-9)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

9-CHLOROHEXADECAFLUORO-3-OXANONE-1-SULFONIC ACID, POTASSIUM SALT (9CL-PF3ONS) UNLABELED (73606-19-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

DODECAFLUORO-3H-4,8-DIOXANONANOIC ACID,SODIUM SALT (NaDONA) UNLABELED (2250081-67-3)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)

Listed on IARC (International Agency for Research on Cancer)

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)

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

METHOD 537.1 ANALYTE PRIMARY DILUTION STD (PDS) IN METHANOL(W/4 MOLAR EQUIV. NAOH)	
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	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

100% METHANOL UNLABELED (67-56-1)					
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)	Maximum allowable dose level (MADL)
No	Yes	No	No		

PERFLUORO-N-OCTANOIC ACID (PFOA) UNLABELED (335-67-1)					
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)	Maximum allowable dose level (MADL)
No	Yes	No	No		

PERFLUOROOCTANESULFONIC ACID (MIX OF ISOMERS) UNLABELED (1763-23-1)					
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)	Maximum allowable dose level (MADL)
No	Yes	Yes	Yes		

Component	State or local regulations
100% METHANOL UNLABELED(67-56-1)	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
POTASSIUM PERFLUOROHEXANESULFONATE UNLABELED (MIX OF ISOMERS) (CP 95%)(3871-99-6)	U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - New Jersey - Right to Know Hazardous Substance List
N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID UNLABELED (MIX OF ISOMERS)(2991-50-6)	U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 07/27/2023

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 H-phrases	
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
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

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.