

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER
1.1. Product Name

Product Form: Mixture

Product Name: SWAK™

1.2. Other Names Not available

1.3. Recommended Use

Anaerobic Pipe Thread Sealant.

1.4. Company Name, Address And Contact Details
Company

Swagelok Manufacturing Company, LLC

29495 F.A. Lennon Drive

Solon, Ohio 44139

440-519-4000

www.swagelok.com
Distributor

Swagelok New Zealand

111c Kerwyn Avenue

East Tamaki, Auckland 2013

New Zealand

(09) 273 2720

1.5. Emergency Phone Number

Emergency Number : New Zealand Poisons Hotline: 0800 764 766

SECTION 2: HAZARDS IDENTIFICATION
2.1. Classification Of The Substance Or Mixture
GHS-NZ classification

6.3A Skin corrosion/irritation, Category 2

6.4A Serious eye damage/eye irritation, Category 2A

2.2. GHS Label Elements, Including Precautionary Statements
GHS-NZ Labeling
Hazard Pictograms (GHS-NZ) :


GHS07

Signal Word (GHS-NZ) :

Warning

Hazard Statements (GHS-NZ) :

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Precautionary Statements (GHS-NZ) :

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P280 - Wear protective gloves, protective clothing, and eye protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 - Specific treatment (see section 4 on this SDS).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other hazards which do not result in classification

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-NZ)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Polytetrafluoroethylene	Ethene, tetrafluoro-, homopolymer / Ethylene, tetrafluoro-, polymer / PTFE / Tetrafluoroethene polymer / Tetrafluoroethylene homopolymer / Teflon / Ethene, 1,1,2,2-tetrafluoro-, homopolymer / Polytetrafluoroethylene resin / SST-3 / Fluoroplast 4 / Polytetrafluoroethylene wax / Fluoroplast-4 / Polymer of 1,1,2,2-tetrafluoroethene	(CAS-No.) 9002-84-0	30 - 40	Not classified
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-	Ethoxylated bisphenol A dimethacrylate / Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- / Bisphenol A, ethoxylated, dimethacrylate / Esterification products of 4,4'-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid / Bisphenol A poly(oxyethylene) ether dimethacrylate / (1-Methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)oxy-2,1-ethanediyl) bismethacrylate / Bisphenol A polyethylene glycol diether dimethacrylate / .alpha.,.alpha.'-[(1-Methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)	(CAS-No.) 41637-38-1	30 - 40	6.3A: Skin Irrit. 2, H315 6.4A: Eye Irrit. 2A, H319
Nonanedioic acid, polymer with 1,2-propanediol	Poly(propylene glycol azelate) / Propylene glycol azelate	(CAS-No.) 29408-67-1	20 - 30	Not classified
Polyethylene glycol	Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- / Polyethylene glycol 6000 / Polyethylene glycol ether / Polyethylene glycols / PEG-10 / Polyethylene glycol 400 / Polyethylene glycol 8000 / PEG / Macrogols / Ethylene oxide polymer / 1,2-Ethandiol, homopolymer / Macrogol / PEG-9 / .alpha.-Hydro-.omega.-hydroxypoly(oxyethylene) / PEG-14 / .alpha.-Hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) / Ethoxylated 1,2-ethandiol / Polyethylene glycol 35 / Polyethylene glycol 115 / Polyethylene glycol-6000 / Poly(ethylene glycol) 400 / Polyethylene oxide	(CAS-No.) 25322-68-3	1 - 5	Not classified
Titanium dioxide	C.I. 77891 / C.I. Pigment White 6 / Titanium oxide	(CAS-No.) 13463-67-7	1 - 5	Not classified

	(TiO ₂) / CI 77891 / Titanium(IV) oxide / C.I. Pigment White 7 / Pigment White 6 / Titanium dioxide nanoparticles / TITANIUM DIOXIDE / Titanium oxide			
Silica, amorphous, fumed, crystalline-free	Colloidal silica / Silica, amorphous, fumed / Pyrogenic colloidal silica / Synthetic amorphous silica / Pyrogenic, fumed, amorphous silica / Silica, amorphous, crystalline-free / SILICA / Aquafil / Amorphous silicon dioxide / Silica, amorphous, fumed, crystalline free / Fumed silica	(CAS-No.) 112945-52-5	< 1	6.1E: Acute Tox. 5 (Oral), H303
Cumene hydroperoxide	Cumyl hydroperoxide / .alpha.,.alpha.-Dimethylbenzyl hydroperoxide / Hydroperoxide, .alpha.,.alpha.-dimethylbenzyl- / Isopropylbenzene hydroperoxide / Hydroperoxide, 1-methyl-1-phenylethyl- / 1-Methyl-1-phenylethyl hydroperoxide / 1-Methyl-1phenylethyl-hydroperoxide / 2-Hydroperoxy-2-phenylpropane	(CAS-No.) 80-15-9	< 1	9.2B: Ecotoxicity to the soil environment B, H422 9.3B: Ecotoxicity to terrestrial vertebrates B, H432 3.1D: Flam. Liq. 4, H227 5.2E: Org. Perox. E, H242 6.1D: Acute Tox. 4 (Oral), H302 6.1B: Acute Tox. 2 (Dermal), H310 6.1D: Acute Tox. 4 (Inhalation:dust,mist), H332 8.2B: Skin Corr. 1B, H314 8.3A: Eye Dam. 1, H318 6.6B: Muta. 2, H341 6.9A: STOT SE 1, H370 9.1D: Aquatic Acute 2, H401 9.1B: Aquatic Chronic 2, H411

Full text of H-statements: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%)

SECTION 4: FIRST AID MEASURES

4.1. Description of Necessary First-Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Obtain medical attention if irritation develops or persists. Immediately drench affected area with water for at least 15 minutes.

Eye Contact: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms/Effects, Acute and Delayed

General: Causes skin irritation. Causes serious eye irritation.

Inhalation: Prolonged exposure may cause irritation. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES**5.1. Extinguishing Media**

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Specific Hazards Arising From the Chemical

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Hazchem Code: Not allocated.

5.3. Special Protective Actions for Fire-Fighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Carbonyl fluoride. Carbon tetrafluoride. Fluorine compounds.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal Precautions, Protective Equipment and Emergency Procedures**

General Measures: Avoid breathing (vapour, mist, spray). Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

6.2. Personal Precautions, Protective Equipment and Emergency Procedures

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for Safe Handling**

Additional Hazards When Processed: Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapour, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidisers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), UK HSE (WEL), Australia OELs, or New Zealand (WES)

Polyethylene glycol (25322-68-3)		
USA AIHA	WEEL TWA (mg/m ³)	10 mg/m ³ (molecular weight>200-aerosol)
Cumene hydroperoxide (80-15-9)		
USA AIHA	WEEL TWA (ppm)	1 ppm
USA AIHA	AIHA chemical category	Skin notation
Titanium dioxide (13463-67-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Australia	TWA (mg/m ³)	10 mg/m ³ (containing no asbestos and <1% crystalline silica-inhalable dust)
New Zealand	TWA (mg/m ³)	10 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ (total inhalable) 4 mg/m ³ (respirable)
United Kingdom	WEL STEL (mg/m ³)	30 mg/m ³ (calculated-total inhalable) 12 mg/m ³ (calculated-respirable)

8.2. Monitoring

Monitoring Methods: A specific exposure sampling method is not available.

Specific Needed Monitoring: A specific exposure sampling method is not available.

Biological Exposure Indices (Bei): If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

8.3. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

8.4. Individual Protection Measures, Such as Personal Protective Equipment (PPE)

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Grainy Off-White Paste With Mild Odour
Odour	: Mild
Odour Threshold	: Not available

pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: > 230 °F (>110 °C)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapour Pressure	: Not available
Relative Vapour Density at 20°C	: Not available
Relative Density	: Not available
Density	: 1.3 g/ml
Specific Gravity	: Not available
Solubility	: Not available
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidisers.
- 10.6. Hazardous Decomposition Products:** None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on Toxicological Effects**

Likely Routes Of Exposure: Dermal, Oral, Inhalation.

Acute Toxicity (Oral): Not classified (Based on available data, the classification criteria are not met).

Acute Toxicity (Dermal): Not classified (Based on available data, the classification criteria are not met).

Acute Toxicity (Inhalation): Not classified (Based on available data, the classification criteria are not met).

Skin Corrosion/Irritation: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified (Based on available data, the classification criteria are not met).

Germ Cell Mutagenicity: Not classified (Based on available data, the classification criteria are not met).

Carcinogenicity: Not classified (Based on available data, the classification criteria are not met).

Specific Target Organ Toxicity (Repeated Exposure): Not classified (Based on available data, the classification criteria are not met).

Reproductive Toxicity: Not classified (Based on available data, the classification criteria are not met).

Specific Target Organ Toxicity (Single Exposure): Not classified (Based on available data, the classification criteria are not met).

Aspiration Hazard: Not classified (Based on available data, the classification criteria are not met).

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

LD50 and LC50 Data:

SWAK™

Safety Data Sheet

According to the Hazardous Substances and New Organisms Act (1996)

Polyethylene glycol (25322-68-3)	
LD50 Oral Rat	22 g/kg
LD50 Dermal Rabbit	> 20 g/kg
Silica, amorphous, fumed, crystalline-free (112945-52-5)	
LD50 Oral Rat	3160 mg/kg
Cumene hydroperoxide (80-15-9)	
LD50 Oral Rat	382 mg/kg
LD50 Dermal Rabbit	0.126 ml/kg
LC50 Inhalation Rat	220 ppm/4h
LC50 Inhalation Rat	1.4 mg/l/4h
ATE NZ (dermal)	126.00 mg/kg bodyweight
Titanium dioxide (13463-67-7)	
LD50 Oral Rat	> 10000 mg/kg
Polytetrafluoroethylene (9002-84-0)	
IARC Group	3
Silica, amorphous, fumed, crystalline-free (112945-52-5)	
IARC Group	3
Titanium dioxide (13463-67-7)	
IARC Group	2B

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: Not classified

Soil toxicity: Not classified

Terrestrial vertebrate toxicity: Not classified

Terrestrial invertebrate toxicity: Not classified

Cumene hydroperoxide (80-15-9)	
LC50 Fish 1	3.9 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
LD50 Bird (oral)	Rat: ENDPOINT: LD50 VALUE: 382 mg/kg

12.2. Persistence and Degradability

SWAK™	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

SWAK™	
Bioaccumulative Potential	Not established.

Cumene hydroperoxide (80-15-9)	
BCF Fish 1	35.5

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Ozone: Not classified

Effect On The Global Warming: Not classified

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with UN RTDG, IMDG, and IATA

UN RTDG	IMDG	IATA
14.1. UN Number		
Not regulated for transport		
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport Hazard Class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing Group		
Not applicable	Not applicable	Not applicable
14.5. Environmental Hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No

14.6. Special Precautions For User No additional information available

14.7. Transport in Bulk According to Annex II of MARPOL and The IBC Code Not applicable

14.8. Hazchem or Emergency Action Code

Hazchem Code: : Not allocated.

SECTION 15: REGULATORY INFORMATION

15.1. International Regulatory Lists

Polytetrafluoroethylene (9002-84-0)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Nonanedioic acid, polymer with 1,2-propanediol (29408-67-1)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Polyethylene glycol (25322-68-3)
Listed on the EU NLP (No Longer Polymers) inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Silica, amorphous, fumed, crystalline-free (112945-52-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Cumene hydroperoxide (80-15-9)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Subject to reporting requirements of United States SARA Section 313
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Titanium dioxide (13463-67-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
 Listed on INSQ (Mexican National Inventory of Chemical Substances)
 Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.2. International Agreements

Titanium dioxide (13463-67-7)

This chemical is subject to the International Convention for the Prevention of Pollution from Ships (MARPOL)

This chemical is subject to the International Convention for the Prevention of Pollution from Ships (MARPOL)

15.3. Local Regulations

Cumene hydroperoxide (80-15-9)

HSNO Approval Number	HSR001368
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Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[1-methylethylidene]di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)

HSNO Approval Number	HSR007296
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SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision : 05/11/2019

Revision

Data Sources : Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.

GHS Full Text Phrases:

3.1D: Flam. Liq. 4	3.1D: Flammable liquids, Category 4
5.2E: Org. Perox. E	5.2E: Organic Peroxides, Type E
6.1B: Acute Tox. 2 (Dermal)	6.1B: Acute toxicity (dermal), Category 2
6.1D: Acute Tox. 4 (Inhalation:dust,mist)	6.1D: Acute toxicity (inhalation:dust,mist) Category 4
6.1D: Acute Tox. 4 (Oral)	6.1D: Acute toxicity (oral), Category 4
6.1E: Acute Tox. 5 (Oral)	6.1E: Acute toxicity (oral), Category 5
6.3A: Skin Irrit. 2	6.3A: Skin corrosion/irritation, Category 2
6.4A: Eye Irrit. 2A	6.4A: Serious eye damage/eye irritation, Category 2A
6.6B: Muta. 2	6.6B: Germ cell mutagenicity, Category 2
6.9A: STOT SE 1	6.9A: Specific target organ toxicity — Single exposure, Category 1
8.2B: Skin Corr. 1B	8.2B: Skin corrosion/irritation, Category 1B
8.3A: Eye Dam. 1	8.3A: Serious eye damage/eye irritation, Category 1
9.1B: Aquatic Chronic 2	9.1B: Hazardous to the aquatic environment — Chronic Hazard, Category 2
9.1D: Aquatic Acute 2	9.1D: Hazardous to the aquatic environment — Acute Hazard, Category 2
9.2B: Ecotoxicity to the soil environment B	9.2B: Ecotoxicity to the soil environment B
9.3B: Ecotoxicity to terrestrial vertebrates B	9.3B: Ecotoxicity to terrestrial vertebrates B
H227	Combustible liquid
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H303	May be harmful if swallowed
H310	Fatal 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.
H332	Harmful if inhaled.

H341	Suspected of causing genetic defects.
H370	Causes damage to organs.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.
H422	Toxic to the soil environment
H432	Toxic to terrestrial vertebrates

Indication of Changes: No additional information available

Abbreviations and Acronyms:

ACGIH – American Conference of Governmental Industrial Hygienists
 AIHA – American Industrial Hygiene Association
 ATE - Acute Toxicity Estimate
 BCF - Bioconcentration Factor
 BEI - Biological Exposure Indices (BEI)
 BOD – Biochemical Oxygen Demand
 CAS No. - Chemical Abstracts Service Number
 COD – Chemical Oxygen Demand
 EC50 - Median Effective Concentration
 EmS-No. (Fire) - IMDG Emergency Schedule Fire
 EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
 ErC50 - EC50 in Terms of Reduction Growth Rate
 ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
 GHS – Globally Harmonized System of Classification and Labeling of Chemicals
 GWP – Global Warming Potential
 IARC - International Agency for Research on Cancer
 IATA - International Air Transport Association
 IBC – International Bulk Chemical Code
 IMDG - International Maritime Dangerous Goods
 LC50 - Median Lethal Concentration
 LD50 - Median Lethal Dose
 LOAEL - Lowest Observed Adverse Effect Level
 LOEC - Lowest-Observed-Effect Concentration
 Log Koc - Soil Organic Carbon-water Partitioning Coefficient
 Log Kow - Octanol/water Partition Coefficient

Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
 MARPOL – International Convention for the Prevention of Pollution
 MFAG-No - Medical First Aid Guide for Use in Accidents Involving Dangerous Goods
 NOAEL - No-Observed Adverse Effect Level
 NOEC - No-Observed Effect Concentration
 NTP – National Toxicology Program
 OEL - Occupational Exposure Limits
 pH – Potential Hydrogen
 SADT - Self Accelerating Decomposition Temperature
 SDS - Safety Data Sheet
 STEL - Short Term Exposure Limit
 STOT – Specific Target Organ Toxicity
 ThOD – Theoretical Oxygen Demand
 TLM - Median Tolerance Limit
 TLV - Threshold Limit Value
 TWA - Time Weighted Average
 UK HSE – United Kingdom Health and Safety Executive
 UN – United Nations
 UN RTDG – United Nations Recommendations on the Transport of Dangerous Goods
 VOC – Volatile Organic Compounds
 WEEL - Workplace Environmental Exposure Levels
 WEL – Workplace Exposure Limit
 WES – Workplace Exposure Standards

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.