

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

**Product Identifier**

Product Form: Mixture

Product Name: SWAK™

**Intended Use of the Product**

Recommended Uses and Restrictions: Anaerobic pipe thread sealant.

**Name, Address, and Telephone of the Responsible Party**
**Company**

Swagelok Manufacturing Company, LLC

29495 F.A. Lennon Drive

Solon, Ohio 44139

440-519-4000

[www.swagelok.com](http://www.swagelok.com)
**Supplier**

Distributor, add your contact information

**Emergency Telephone Number**

Emergency Number: Infotrac: 1-352-323-3500

## SECTION 2: HAZARDS IDENTIFICATION

**Emergency Overview:**

Grainy Off-White Paste With Mild Odor.

**Classification of the Substance or Mixture**
**GHS Classification (CN)**
**Health Hazards**

- : Skin corrosion/irritation, Category 2
- : Serious eye damage/eye irritation, Category 2A
- : Skin sensitization, Category 1
- : Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

**Environmental Hazards**

- : Hazardous to the aquatic environment — Chronic Hazard, Category 4

**Hazard Pictograms (GHS-CN)**

:


**Signal Word (GHS-CN)**

- : Warning

**Hazard Statements (GHS-CN)**

- : Causes skin irritation (H315).  
May cause an allergic skin reaction (H317).  
Causes serious eye irritation (H319).  
May cause respiratory irritation (H335).  
May cause long lasting harmful effects to aquatic life. (H413).
- : Avoid breathing vapors, mist, or spray (P261).  
Wash hands, forearms, and other exposed areas thoroughly after handling (P264).  
Use only outdoors or in a well-ventilated area. (P271).  
Contaminated work clothing should not be allowed out of the workplace. (P272).  
Avoid release to the environment. (P273).  
Wear protective gloves, protective clothing, and eye protection (P280).
- : IF ON SKIN: Wash with plenty of water (P302+P352).  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340).  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).  
Call a POISON CENTER or doctor if you feel unwell (P312).  
Specific treatment (see section 4 on this SDS) (P321).  
If skin irritation occurs: Get medical advice/attention. (P332+P313).  
If skin irritation or rash occurs: Get medical advice/attention. (P333+P313).

**Prevention Precautionary Statements**
**Response Precautionary Statements**

## Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

	<p>If eye irritation persists: Get medical advice/attention. (P337+P313).          Take off contaminated clothing and wash it before reuse. (P362+P364).          Wash contaminated clothing before reuse. (P363).</p>
<b>Storage Precautionary Statements</b>	<p>: Store in a well-ventilated place. Keep container tightly closed. (P403+P233).          Store locked up. (P405).</p>
<b>Disposal Precautionary Statements</b>	<p>: Dispose of contents/container in accordance with local, regional, national, and international regulations (P501).</p>

### Health Hazard Information

**Symptoms/Injuries:** Causes skin irritation. Causes serious eye irritation. Skin sensitization. May cause respiratory irritation.

**Symptoms/Injuries After Inhalation:** Sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. 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. May cause an allergic skin reaction.

**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.

### Physicochemical Hazard

**Physical and Chemical Hazards:** Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause an allergic skin reaction.

### Environmental Hazard

**Environmental Hazards:** May cause long lasting harmful effects to aquatic life.

### Other Hazards

**Other Hazards Which Do not Result in Classification** : Exposure may aggravate pre-existing eye, skin, or respiratory conditions. 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. 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.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture/Substance

**Distinction of Substance or Mixture** : Mixture

Name	Concentration	CAS-No.
Polytetrafluoroethylene	30 - 40%	9002-84-0
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-	30 - 40%	41637-38-1
Nonanedioic acid, polymer with 1,2-propanediol	20 - 30%	29408-67-1
Polyethylene glycol	1 - 5%	25322-68-3
Titanium dioxide	1 - 5%	13463-67-7
Silica, amorphous, fumed, crystalline-free	< 1%	112945-52-5
Cumene hydroperoxide	< 1%	80-15-9

## SECTION 4: FIRST AID MEASURES

### First Aid

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

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

**First-aid Measures After 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.

## Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### The Most Important Symptoms and Health Effects

**Symptoms/Injuries:** Causes skin irritation. Causes serious eye irritation. Skin sensitization. May cause respiratory irritation.

**Symptoms/Injuries After Inhalation:** Sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. 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. May cause an allergic skin reaction.

**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.

### Advice for the Rescuer

Do not enter fire area without proper protective equipment, including respiratory protection.

### Special Note for Doctor

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

## SECTION 5: FIREFIGHTING MEASURES

### Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide (CO<sub>2</sub>), 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.

### Special Hazards

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

**Explosion Hazard:** Product is not explosive.

**Reactivity in Case of Fire:** On burning: release of harmful/irritant gases/vapors.

**Hazardous Decomposition Products in Case of Fire:** At high temperature may liberate toxic gases. Fluoride compounds. Hydrogen. Carbon oxides (CO, CO<sub>2</sub>). Phenolic compounds. Acrid vapors.

### Fire Precautions and Protective Measures

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

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

**Specific Fire Fighting:** When heated, material emits irritating fumes. Potential dust explosion hazard.

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

**Prevention Measures for Secondary Accidents:** Ventilate area. Eliminate ignition sources.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

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

#### For Non-Emergency Personnel

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

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 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.

### Environmental Protection Measures

**Environmental Precautions:** Prevent entry to sewers and public waters.

### Methods and Material Used for Collection, Disposal of Leak

**Methods and Equipment for Containment and Cleaning up:** Avoid generation of dust during clean-up of spills. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

### Precautionary Measures to Prevent the Occurrence of Secondary Disasters

**Secondary Disaster Prevention Measures:** Ventilate area. Eliminate ignition sources.

### SECTION 7: HANDLING AND STORAGE

#### Handling

**Technical Measures:** Comply with applicable regulations. Avoid creating or spreading dust.

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

**Local and General Ventilation:** Ensure adequate air ventilation.

**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 vapors, mist, spray.

**Prevents Handling of Incompatible Substances or Mixtures:** All heat sources, including direct sunlight.

#### Storage

**Technical Measures:** Comply with applicable regulations.

**Incompatible Substances or Mixtures:** Refer to Section 10.

**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.

**Material Used in Packaging/Containers:** Store in original container.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Limits

Titanium dioxide (13463-67-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
China	OEL STEL	16 mg/m <sup>3</sup> (calculated-total dust)
China	OEL TWA	8 mg/m <sup>3</sup> (total dust)
China	Catalogue of Occupational Hazard Factors	Category 1 - Dusts

#### Biological Limits

No data available

#### Monitoring Methods

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

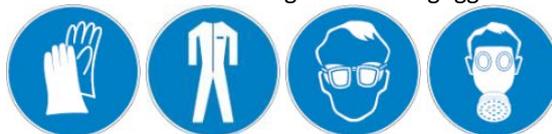
#### Engineering Controls

**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.

#### Personal Protective Equipment

##### Personal Protective Equipment:

Gloves. Protective clothing. Protective goggles. Respiratory protection.



**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.

**Hand Protection:** Wear protective gloves.

**Eye and Face Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

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

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on Basic Physical and Chemical Properties

<b>Appearance</b>	: Grainy Off-White Paste With Mild Odor
<b>Physical State</b>	: Liquid
<b>Odour</b>	: Mild
<b>Odor Threshold</b>	: Not available
<b>pH Value</b>	: No data available
<b>Melting Point/Freezing Point</b>	: No data available

## Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

<b>Boiling Point, Initial Boiling Point and Boiling Range</b>	: No data available
<b>Flash Point</b>	: > 230 °F (> 110 °C)
<b>Autoignition Temperature</b>	: No data available
<b>Flammability (solid, gas)</b>	: Non flammable
<b>Vapor Pressure</b>	: No data available
<b>Relative Vapor Density At 20 °C</b>	: No data available
<b>Solubility</b>	: No data available
<b>N-octanol/Water Distribution Coefficient</b>	: No data available
<b>Decomposition Temperature</b>	: No data available
<b>Viscosity</b>	: No data available
<b>Explosive Limits (G/M<sup>3</sup>)</b>	: No data available
<b>Explosive Limits (Vol %)</b>	: No data available
<b>Density</b>	: 1.3 g/ml

### SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

**Hazardous Decomposition Products:** None expected under normal conditions of use.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

<b>Acute Toxicity (Oral) - Description</b>	: No data available
<b>Acute Toxicity (Dermal) - Description</b>	: No data available
<b>Acute Toxicity (Inhalation) - Description</b>	: No data available
<b>Skin Corrosion/Irritation - Description</b>	: Causes skin irritation.
<b>Serious Eye Damage/Irritation - Description</b>	: Causes serious eye irritation.
<b>Respiratory or Skin Sensitization - Description</b>	: May cause an allergic skin reaction.
<b>Germ Cell Mutagenicity - Description</b>	: No data available
<b>Carcinogenicity - Description</b>	: No data available
<b>Reproductive Toxicity - Description</b>	: No data available
<b>Specific Target Organ Toxicity (Single Exposure) - Description</b>	: May cause respiratory irritation.
<b>Specific Target Organ Toxicity (Repeated Exposure) - Description</b>	: No data available
<b>Aspiration - Description</b>	: No data available
<b>Other Health Hazard</b>	: No data available

#### Information on Toxicological Effects Ingredient(s)

<b>Polytetrafluoroethylene (9002-84-0)</b>	
<b>IARC Group</b>	3
<b>Polyethylene glycol (25322-68-3)</b>	
<b>LD50 Oral Rat</b>	22 g/kg
<b>LD50 Dermal Rabbit</b>	> 20 g/kg
<b>Silica, amorphous, fumed, crystalline-free (112945-52-5)</b>	
<b>LD50 Oral Rat</b>	3160 mg/kg
<b>IARC Group</b>	3
<b>Cumene hydroperoxide (80-15-9)</b>	
<b>LD50 Oral Rat</b>	382 mg/kg
<b>LD50 Dermal Rabbit</b>	0.126 ml/kg
<b>LC50 Inhalation Rat</b>	1.4 mg/l/4h
<b>LC50 Inhalation Rat</b>	220 ppm/4h
<b>ATE (Dermal)</b>	126 mg/kg bodyweight
<b>ATE (Dust/Mist)</b>	0.5 mg/l/4h

## Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

<b>Titanium dioxide (13463-67-7)</b>	
LD50 Oral Rat	> 10000 mg/kg
IARC Group	2B

**SECTION 12: ECOLOGICAL INFORMATION****Toxicity**

<b>Ecotoxicity</b>	: May cause long lasting harmful effects to aquatic life.
<b>Acute Aquatic Toxicity - Description</b>	: Not classified.
<b>Chronic Aquatic Toxicity - Description</b>	: May cause long lasting harmful effects to aquatic life.

<b>Cumene hydroperoxide (80-15-9)</b>	
LC50 Fish 1	3.9 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

**Persistence and Degradability**

<b>SWAK™</b>	
<b>Persistence and Degradability</b>	Not established.

**Bioaccumulative Potential**

<b>SWAK™</b>	
<b>Bioaccumulative Potential</b>	Not established.
<b>Cumene hydroperoxide (80-15-9)</b>	
BCF Fish 1	35.5

**Mobility in Soil** Not established**Other Adverse Effects**

<b>Ozone - Description</b>	: Not classified.
<b>Other Information</b>	: Avoid release to the environment.

**SECTION 13: DISPOSAL CONSIDERATIONS****Waste Chemicals****Additional Information:** Container may remain hazardous when empty. Continue to observe all precautions.**Ecology - Waste Materials:** Avoid release to the environment.**Diposal Matters****Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.**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 UNRTDG** Not regulated for transport**In Accordance with IATA** Not regulated for transport**In Accordance with IMDG** Not regulated for transport**SECTION 15: REGULATORY INFORMATION****Asia/Pacific Regulations**

<b>SWAK™</b>	
<b>Priority List of Hazardous Chemical Wastes</b>	No
<b>Polytetrafluoroethylene (9002-84-0)</b>	
<b>Priority List of Hazardous Chemical Wastes</b>	No
<b>Regulatory Reference</b>	
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	

## Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

Listed on INSQ (Mexican National Inventory of Chemical Substances)	
Listed on the TCSI (Taiwan Chemical Substance Inventory)	
<b>Nonanedioic acid, polymer with 1,2-propanediol (29408-67-1)</b>	
<b>Priority List of Hazardous Chemical Wastes</b>	No
<b>Regulatory Reference</b>	
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)	
<b>Polyethylene glycol (25322-68-3)</b>	
<b>Priority List of Hazardous Chemical Wastes</b>	No
<b>Regulatory Reference</b>	
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)	
<b>Silica, amorphous, fumed, crystalline-free (112945-52-5)</b>	
<b>Priority List of Hazardous Chemical Wastes</b>	No
<b>Regulatory Reference</b>	
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)	
<b>Cumene hydroperoxide (80-15-9)</b>	
<b>Catalogue of Hazardous Chemicals (2015)</b>	Listed
<b>Priority List of Hazardous Chemical Wastes</b>	No
<b>State Or Local Regulations</b>	Catalogue of Hazardous Chemicals (2015)
<b>Regulatory Reference</b>	
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)	

## Chemical Safety Data Sheet

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

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)**

**Priority List of Hazardous Chemical Wastes** | No

### Regulatory Reference

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)**

**Priority List of Hazardous Chemical Wastes** | No

### Regulatory Reference

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)

## International Agreements

**Polytetrafluoroethylene (9002-84-0)**

**Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes (Basel Convention)**

Hazardous Substances Containing in Waste (Act, Art.2, Para.1-1 (a), 3 Ministry Notification No.1 of 1998)

**Titanium dioxide (13463-67-7)**

### United Nation Lists

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

## SECTION 16: OTHER INFORMATION

**Date of Preparation or Latest Revision** : 2019/12/19  
**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.  
**Other Information** : This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

**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

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

**Chemical Safety Data Sheet**

This SDS is prepared in accordance with GB/T 16483, GB/T 17519 and GB 30000

---

BEI - Biological Exposure Indices (BEI)	MAC – Maximum Allowable Concentration
BOD – Biochemical Oxygen Demand	MFAG-No - Medical First Aid Guide for Use in Accidents Involving Dangerous Goods
CAS No. - Chemical Abstracts Service Number	NOAEL - No-Observed Adverse Effect Level
CN - China	NOEC - No-Observed Effect Concentration
COD – Chemical Oxygen Demand	NTP – National Toxicology Program
EC50 - Median Effective Concentration	OEL - Occupational Exposure Limits
EmS-No. (Fire) - IMDG Emergency Schedule Fire	pH – Potential Hydrogen
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage	SADT - Self Accelerating Decomposition Temperature
ErC50 - EC50 in Terms of Reduction Growth Rate	SDS - Safety Data Sheet
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)	STEL - Short Term Exposure Limit
EU - European Union	ThOD – Theoretical Oxygen Demand
GHS – Globally Harmonized System of Classification and Labeling of Chemicals	TLM - Median Tolerance Limit
IARC - International Agency for Research on Cancer	TLV - Threshold Limit Value
IATA - International Air Transport Association	TPQ - Threshold Planning Quantity
IMDG - International Maritime Dangerous Goods	TWA - Time Weighted Average
LC50 - Median Lethal Concentration	UN – United Nations
LD50 - Median Lethal Dose	UN RTDG – United Nations Recommendations on the Transport of Dangerous Goods
LOAEL - Lowest Observed Adverse Effect Level	VOC – Volatile Organic Compounds
LOEC - Lowest-Observed-Effect Concentration	WEEL - Workplace Environmental Exposure Levels
Log Koc - Soil Organic Carbon-water Partitioning Coefficient	

*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.*

China GHS SDS