

# Material Safty Data Sheet

Product

SR708 TR

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name	SR708 Transperancy
1.2 Recommended use of the chemical and restrictions on use	
Recommended use of the product	Panel sealing
Restrictions on use of the product	No data
1.3 Company information	
Company Name	DAEHEUNG CHEMICAL CO., LTD.
Address	52, Sandan-ro15beon-gil,Pyeongtaeksi,Gyeonggi-do
Emergency telephone number	+82-31-663-5251

## 2. HAZARD IDENTIFICATION

2.1 Hazard, Risk classification Skin sensitization: Category 1

2.2 GHS label elements

Symbol



Signal word

Waring

Harmful Risk phrases

H317 May cause an allergic skin reaction.

Precautions

P261 Avoid breathing vapours.

Prevention

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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

Corresponding

P333+P313 If skin irritation or rash occurs: Get medical advice/attention

P362+P364 Take off contaminated clothing and wash it before reuse.

Storage

Not available

Disposal

P501 Dispose of contents and container in accordance with local regulations.

Amorphous, fumed silica

Health 0

Fire 1

Reactivity 0

Methyltrimethoxysilane

Health 1

Fire 3

Reactivity 1

N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane

Health 3

Fire 1

Reactivity 1

Polydimethylsiloxane

Health 1

Fire 1

Reactivity 0

Siloxanes and Silicones, di-Me, hydroxy-terminated

Health 1

Fire 2

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	Comon Name	CAS No	Contents(%)
Amorphous, fumed silica	SILICA, AMORPHOUS, FUMED, CRYSTALLINE FREE	112945-52-5	5 ~ 10
Methyltrimethoxysilane	METHYLTRIMETHYLOXYSILANE	1185-55-3	1 ~ 5
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	(N-(3-(TRIMETHOXYSILYL)PROPYL)ETHYL	1760-24-3	0.1 ~ 1
Polydimethylsiloxane	DIMETHYLPOLYSILOXANE/WATER EMULSIONS	63148-62-9	10 ~ 20
Siloxanes and Silicones, di-Me, hydroxy-terminated	DIMETHYL POLYSILOXANE	70131-67-8	60 ~ 70

## 4. FIRST AID MEASURES

4.1 Eye contact	Get emergency medical attention. Rinse skin and eyes immediately with plenty of water for at least 20 minutes when in contact with the material.
4.2 In case of skin contact	If skin irritation or rash occurs, seek medical advice and advice.오. Wash contaminated clothing before reuse. In the case of hot materials, immerse or wash affected areas in a large amount of cold water to remove heat Get emergency medical attention. Remove contaminated clothing and shoes and isolate contaminated areas. Rinse skin and eyes immediately with plenty of water for at least 20 minutes when in contact with the material. Prevent spread of contamination on mild skin contact
4.3 Inhalation	Move to a place with fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Please warm and stabilize.
4.4 Ingestion	Get emergency medical attention.
4.5 Other precautions	Have the health care worker know about the material and take protective measures

## 5. FIRE FIGHTING MEASURES

5.1. Extinguishing media	Suitable extinguishing media	Use alcohol foam, carbon dioxide or water spray for digestion related to this material. Use dry sand or earth for digestion.
5.2. Special hazards arising from the substance or mixture	Hazardous combustion products	Container may explode on heating Some are burned but not easily ignited Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes May cause irritating, corrosive and toxic gases in case of fire
5.3. Protective equipment and precautions for fire-fighting	Protective equipment and precautions for fire-fighting	Be aware that it may be melted and transported. In case of tank fire, extinguish at maximum distance or use unmanned fire fighting equipment In the event of a large fire in a tank fire, use unmanned fire fighting equipment and allow it to retreat if it is not possible Rescuers should wear appropriate protective equipment. Extinguish the area and maintain safety distance. Some can be transported at high temperatures Leaky water may cause contamination. Contact may cause skin and eye burns.

Drill ditches for the disposal of digestive waters to prevent them from being scattered.

Protective equipment and precautions for fire-fighting

Move container from fire area if it is not hazardous.

Cool containers with large amounts of water even after the fire has extinguished.

In the event of a tank fire, if there is a high tone in the pressure relief device or if the tank is discolored, immediately withdraw it

Tanks Fires in a fire.

## 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, protective equipment and emergency procedures

Remove all ignition sources as very fine particles may cause fire or explosion.

Wipe off any spills immediately and follow all protective precautions.

Remove all ignition sources.

Stop the leak if it is not dangerous.

Do not touch a damaged container or spill without adequate protection.

Cover with plastic sheet to prevent diffusion

Note the substances and conditions to avoid

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements, and confined spaces.

6.3. Methods and material for containment and cleaning up

Absorb spillage with inert materials (eg dry sand or earth) and place in a chemical waste container.

Absorb liquid and rinse contaminated area with detergent and water..

## 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid inhalation.(Dust, fume, gas, mist, steam, spray)

Do not carry contaminated clothing out of the workplace.

Follow all MSDS / label precautions as product residues may remain after emptying containers.

Avoid prolonged or repeated skin contact.

Note the substances and conditions to avoid

Refer to engineering controls and personal protective equipment.

7.2 Safe storage

The empty drum should be completely drained, properly blocked and immediately returned to the drum regulator or properly positioned.

## 8. EXPOSURECONTROLS & PERSONAL PROTECTION

8.1. Exposure standards for chemicals, biological exposure standards, etc.

Domestic regulation

No data

ACGIH regulation

No data

Biological exposure standard

No data

8.3 Personal protective equipment

Respiratory protection

Wear a respirator that has been approved by the Korean Occupational Safety and Health Administration in accordance with the physicochemical properties of the substance being exposed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance

Physical Form

Paste

Color

Transparency

9.2 Odor

alcohol

9.3 Odor threshold

No data

9.4 pH

No data

9.5 Melting point / freezing point

No data

9.6 Boiling point

No data

9.7 Flash point

No data

9.8 Evaporation Rate

No data

9.9 Flammability (solid, gas)

No data

9.10 Upper/lower flammability or explosive limits

No data

9.11 Vapor Pressure

No data

9.12 Solubility

No data

9.13 Vapor Density

No data

9.14 Specific gravity	1.00 ~ 1.04
9.15 N-octanol/water partition coefficient	No data
9.16 Autoignition temperature	No data
9.17 Decomposition Temperature	No data
9.18 Viscosity	Paste
9.19 Molecular weight	No data

## 10. STABILITY AND REACTIVITY

10.1 Possibility of chemical stability and adverse reaction	
Amorphous, fumed silica	Container may explode on heating
Amorphous, fumed silica	Some are burned but not easily ignited
Amorphous, fumed silica	Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes
Amorphous, fumed silica	May cause irritating, corrosive and toxic gases in case of fire
Methyltrimethoxysilane	Flammable liquids and vapors
Methyltrimethoxysilane	Violent reaction may cause fire and explosion.
Methyltrimethoxysilane	May form explosive mixture at or above flash point
Methyltrimethoxysilane	Container may explode on heating
Methyltrimethoxysilane	Highly flammable: easily ignited by heat, spark, flame
Methyltrimethoxysilane	Leakage is a fire / explosion hazard.
Methyltrimethoxysilane	Vapors may explode indoors, outdoors, and in drains
Methyltrimethoxysilane	Vapors may form explosive mixtures with air
Methyltrimethoxysilane	Vapors may cause dizziness or suffocation without knowledge.
Methyltrimethoxysilane	May cause irritation, corrosive and toxic gas in case of fire.
Methyltrimethoxysilane	Inhalation and contact may irritate or burn the skin and eyes.
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
Polydimethylsiloxane	Stable at normal temperature and pressure
Polydimethylsiloxane	Container may explode on heating
Polydimethylsiloxane	Some are burned but not easily ignited
Polydimethylsiloxane	May cause irritation and poisonous gas in case of fire
Polydimethylsiloxane	Inhalation of the substance may be harmful
Polydimethylsiloxane	Some fluids may cause dizziness, suffocation-inducing vapors
terminated Siloxanes and Silicones, di-Me, hydroxy-	Stable at normal temperature and pressure
terminated Siloxanes and Silicones, di-Me, hydroxy-	Container may explode on heating
terminated Siloxanes and Silicones, di-Me, hydroxy-	Some are burned but not easily ignited
terminated Siloxanes and Silicones, di-Me, hydroxy-	May cause irritation and poisonous gas in case of fire
terminated Siloxanes and Silicones, di-Me, hydroxy-	Inhalation of the substance may be harmful
terminated Siloxanes and Silicones, di-Me, hydroxy-	Some fluids may cause dizziness, suffocation-inducing vapors
10.2 Conditions to avoid	
Amorphous, fumed silica	Heat source, spark, flame, etc.
Methyltrimethoxysilane	Keep away from heat, sparks, open flame and heat. – No smoking
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
Polydimethylsiloxane	Heat source, spark, flame, etc.
terminated Siloxanes and Silicones, di-Me, hydroxy-	Heat source, spark, flame, etc.
10.3 Substances to avoid	
Amorphous, fumed silica	Combustible materials, reducing materials
Methyltrimethoxysilane	No data
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
Polydimethylsiloxane	Combustible material
Polydimethylsiloxane	Irritant, toxic gas
terminated Siloxanes and Silicones, di-Me, hydroxy-	Combustible material
terminated Siloxanes and Silicones, di-Me, hydroxy-	Irritant, toxic gas

#### 10.4 Hazardous materials generated during decomposition

Amorphous, fumed silica	Corrosive / toxic fume
Amorphous, fumed silica	Irritating, corrosive, toxic gas
Methyltrimethoxysilane	During burning, pyrolysis or combustion may produce irritating and highly toxic gases.
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	During burning, pyrolysis or combustion may produce irritating and highly toxic gases.
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. Information about possible routes of exposure

Amorphous, fumed silica	Exposure to respiration can cause pneumoconiosis in large quantities of inhalation May cause nausea, vomiting and diarrhea by stimulating the stomach. Exposed to skin contact Exposed by eye contact
Methyltrimethoxysilane	stimulus
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	Respiratory tract burns, allergic reactions Mucous membrane burn Skin burns, allergic reactions Eye burn
Polydimethylsiloxane	Can absorb body by inhalation
Polydimethylsiloxane	Can be absorbed by inhalation and extinguisher
Polydimethylsiloxane	Through skin, digestive system, can absorb body by inhalation of aerosol
Polydimethylsiloxane	Absorption of body by inhalation of steam
Polydimethylsiloxane	Can be absorbed by inhalation, skin and digestive system
Siloxanes and Silicones, di-Me, hydroxy-terminated	Can absorb body by inhalation
Siloxanes and Silicones, di-Me, hydroxy-terminated	Can be absorbed by inhalation and extinguisher
Siloxanes and Silicones, di-Me, hydroxy-terminated	Through skin, digestive system, can absorb body by inhalation of aerosol
Siloxanes and Silicones, di-Me, hydroxy-terminated	Absorption of body by inhalation of steam
Siloxanes and Silicones, di-Me, hydroxy-terminated	Can be absorbed by inhalation, skin and digestive system

#### 11.2 Health hazard information

##### Acute toxicity

##### Oral

Amorphous, fumed silica	LD50 > 3100 mg/kg Rat
Methyltrimethoxysilane	LD50 12.3 mg/kg Rat
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	LD50 2400 mg/kg Rat
Polydimethylsiloxane	LD50 > 17000 mg/kg Rat
Siloxanes and Silicones, di-Me, hydroxy-terminated	LD50 > 64 mg/kg Rat (Labor Department 3)

##### Percutaneous

Amorphous, fumed silica	No data
Methyltrimethoxysilane	(No data)
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	LD50 16000 mg/kg Rabbit
Polydimethylsiloxane	LD50 > 2000 mg/kg Rabbit
Siloxanes and Silicones, di-Me, hydroxy-terminated	LD50 > 16 mg/kg Rabbit (Labor Department 1)

##### Inhalation

Amorphous, fumed silica	No data
Methyltrimethoxysilane	(No data)
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data

	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated Skin corrosive or irritant	No data
	Amorphous, fumed silica	No skin irritation reported
	Methyltrimethoxysilane	rabbit, Weak stimulus OPEN DRAIZE TEST, Mild
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No irritation: 24, 48, 72 hours after erythema score less than 1.5
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated Severe eye damage or irritation	No data
	Amorphous, fumed silica	No eye irritation reported
	Methyltrimethoxysilane	rabbit, Weak stimulus STANDARD DRAIZE TEST, Mild
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	With stimulation: observation mean (24 + 48 + 72 hrs) chemosis 3.0, enanthema 2.5, congestion 1.0, opacity 2.0
	Polydimethylsiloxane	Eye Standard dose test Rabbit amount: 100 mg / 1H; Reaction: Mild (light stimulus)
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated Respiratory sensitization	No data
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated Skin sensitization	No data
	Amorphous, fumed silica	No skin sensitization reported in humans
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	sensitive
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated Carcinogenicity	No data
	Industrial Safety and Health Act	
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated Notice of Ministry of Employment and Labor	No data
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated IARC	No data
	Amorphous, fumed silica	Group 3 (Silica, amorphous )
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-terminated OSHA	No data
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data

	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-	No data
	ACGIH	
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
	N-(2-Aminoethyl)-3-	No data
aminopropyltrimethoxysilane	Polydimethylsiloxane	No data
	Siloxanes and Silicones, di-Me, hydroxy-	No data
terminated	NTP	
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
	N-(2-Aminoethyl)-3-	No data
aminopropyltrimethoxysilane	Polydimethylsiloxane	No data
	Siloxanes and Silicones, di-Me, hydroxy-	No data
terminated	EU CLP	
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
	N-(2-Aminoethyl)-3-	No data
aminopropyltrimethoxysilane	Polydimethylsiloxane	No data
	Siloxanes and Silicones, di-Me, hydroxy-	No data
terminated	Germ cell mutagenicity	
	Amorphous, fumed silica	In vivo / In vitro tests There was no evidence that this substance caused mutations in any of the tests. - Genotoxicity effects do not occur when exposed to this material.
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-	Return mutation test: negative concentration > 5000 ug / plate HGPRT assay: negative CHO cells: S9-: 0.1-4.0 mg / ml, S9 +: 2.0-5.0 mg / ml Sister exchange chromosomal aberration test: negative, CHO cells: 1.5 to 4.0 mg / ml without S9 activation; 1.0 to 3.5 mg / ml with S9 activation Micronucleus Test: Negative Mouse (Swiss webster): 87.5, 175, and 280 mg / kg
	Polydimethylsiloxane	No data
terminated	Siloxanes and Silicones, di-Me, hydroxy-	No data
	Reproductive toxicity	
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
	N-(2-Aminoethyl)-3-	NOAEL=500 mg/kg bw/day
aminopropyltrimethoxysilane	Polydimethylsiloxane	No data
	Siloxanes and Silicones, di-Me, hydroxy-	No data
terminated	Specific target organ toxicity (single exposure)	
	Amorphous, fumed silica	Short-term exposure may cause respiratory irritation.
	Methyltrimethoxysilane	No data
	N-(2-Aminoethyl)-3-	No data
aminopropyltrimethoxysilane	Polydimethylsiloxane	No data
	Siloxanes and Silicones, di-Me, hydroxy-	No data
terminated	Specific target organ toxicity (repeated exposure)	
	Amorphous, fumed silica	After two years of long-term application, evidence for reversible effects in this material could not be explained, and at high doses, there was only a slight increase in tissue weight or growth delay from time to time. - showed normal lung reaction.
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-	Rat:NOEAL 500mg/kg,0, 25, 125, and 500 mg/kg/day, Exposure period 28 days No effect.
	Polydimethylsiloxane	No data
	Siloxanes and Silicones, di-Me, hydroxy-	No data
terminated	Inhalation hazard	
	Amorphous, fumed silica	No data
	Methyltrimethoxysilane	No data
aminopropyltrimethoxysilane	N-(2-Aminoethyl)-3-	No data

Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

## 12. ECOLOGICAL INFORMATION

### 12.1. Ecotoxicity

Fish	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	LC50 32662.842 mg/l 96 hr
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	LC50 200 mg/l 96 hr <i>Lepomis macrochirus</i>
Polydimethylsiloxane	LC50 37.79 mg/l 96 hr <i>Lepomis macrochirus</i>
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data
Shellfish	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	LC50 29104.090 mg/l 48 hr
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	EC50 90 mg/l 48 hr <i>Daphnia magna</i>
Polydimethylsiloxane	LC50 44.5 mg/l 48 hr <i>Daphnia magna</i>
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data
Algae	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	EC50 1.000 mg/l 96 hr
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	ErC50 8.8 mg/l 72 hr <i>Selenastrum capricornutum</i>
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

### 12.2. Persistence and degradability

Persistence	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	log Kow -0.67 ((Estimate))
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	log Kow -1.67 ((Estimate))
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	log Kow 2.43
degradability	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	(No data )
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

### 12.3. Bioaccumulation

Enrichment	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	(No data )
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	BCF 14.77
Biodegradability	
Amorphous, fumed silica	No data
Methyltrimethoxysilane	(No data )
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	39 (%) 28 day
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

### 12.4. Soil mobility

Amorphous, fumed silica	No data
Methyltrimethoxysilane	No data
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	No data
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

### 12.5. Other harmful effects

Amorphous, fumed silica	No data
Methyltrimethoxysilane	No data
N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane	Underwater stability Half hour Less than 1 hour
Polydimethylsiloxane	No data
Siloxanes and Silicones, di-Me, hydroxy-terminated	No data

### 13. DISPOSAL CONSIDERATIONS

13.1 Disposal method	Dispose of contents and container in accordance with local regulations.
13.2 Disposal considerations	Dispose of contents and container in accordance with local regulations.

### 14. TRANSPORT INFORMATION

14.1 UN Number (UN No.)	UN transport hazard classification not available
14.2. UN proper shipping name	Not applicable
14.3. Transport hazard class(es)	Not applicable
14.4. Packing group	Not applicable
14.5. Environmental hazards	No data
14.6 Special safety measures that the user needs or needs to know about transportation or transportation	
Emergency measures in case of fire	Not applicable
Emergency Action	Not applicable
14.7 Other International Transportation Regulations	
Air Transport (IATA-DGR)	Not subject to IATA regulations.

### 15. REGULATORY INFORMATION

15.1 Regulation by the Industrial Safety and Health Act	No data
15.2 Regulation by Chemical Substance Control Act	No data
15.3 Regulation under dangerous goods safety management law	No data
15.4 Regulation by waste management law	Designated waste
15.5 Other domestic and foreign regulations	
Domestic regulation	
Residual Organic Pollutant Control Act	Not available
Foreign regulation	
OSHA regulations	Not applicable
CERCLA regulations	Not applicable
US Administration Information(EPCRA 302 regulations)	Not applicable
US Administration Information(EPCRA 304 regulations)	Not applicable
US Administration Information(EPCRA 313 regulations)	Not applicable
US Administration Information(Rotterdam Convention material)	Not applicable
US Administration Information(Stockholm Convention substance)	Not applicable
US Administration Information(Montreal Protocol substance)	Not applicable
EU Classification information(Confirmed classification result)	Not applicable
EU Classification information(Danger phrases)	Not applicable
EU Classification information(Safety phrases)	Not applicable

### 16. OTHER INFORMATION

#### 16.1 Source of material

Amorphous, fumed silica

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Information on possible routes of exposure)

Seton compliance resource center(<http://www.setonresourcecenter.com>)(Information on possible routes of exposure)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)(Oral)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)(Skin corrosive or irritant)

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)(Severe eye damage or irritation )

OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)(Skin sensitization)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)(Germ cell mutagenicity)  
OECD SIDS(<http://www.chem.unep.ch/irptc/sids/OECD/SIDS/silicates.pdf>)(Specific target organ toxicity (single exposure))  
International Programme on Chemical Safety(IPCS INCHEM)(<http://www.inchem.org/>)(Specific target organ toxicity (repeated exposure))  
OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)(Specific target organ toxicity (repeated exposure))  
OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)(Recommended use of the product)

#### Methyltrimethoxysilane

THOMSON(oral)  
THOMSONSkin corrosive or irritant )  
THOMSON(Severe eye damage or irritation )  
ECOSAR(fish)  
ECOSAR(shellfish)  
ECOSAR(algae)

#### N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane

OECD 401, EEC 67/548 1967)-79/831, OECD SIDS(Oral)  
OECD SIDS(Percutaneous)  
OECD TG 404 ,OECD SIDS(Skin corrosive or irritant)  
OECD TG 405 OECD SIDS(Severe eye damage or irritation )  
OECD TG406, OECD SIDS (1992)(Skin sensitization)  
EPA Health Effect Test Guidelines, EPA Report 560/6-83-001, OECD SIDS(Germ cell mutagenicity)  
EPA Health Effects Test Guidelines, OEC SIDS(Germ cell mutagenicity)  
OECD TG 471, Directive 84/449/EEC(Germ cell mutagenicity)  
OECD TG 422, OECD SIDS(Reproductive toxicity)  
OECD TG 422: US EPA Guideline OPPTS 870.3650, OECD SIDS(Specific target organ toxicity (repeated exposure))  
Static,EPA-660/3-75-009,SIDS(fish)  
Static,OECD Guide-line 202,SIDS(shellfish)  
OECD Guide-line 201,SIDS(Algae)  
OECD SIDS(Biodegradable)

#### Polydimethylsiloxane

National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)(Oral)  
National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)(Percutaneous)  
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Severe eye damage or irritation )  
The ECOTOXicology database (ECOTOX)([http://cfpub.epa.gov/ECOTOX/quick\\_query.htm](http://cfpub.epa.gov/ECOTOX/quick_query.htm))(Fish)  
The ECOTOXicology database (ECOTOX)([http://cfpub.epa.gov/ECOTOX/quick\\_query.htm](http://cfpub.epa.gov/ECOTOX/quick_query.htm))(shellfish)  
The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>)

#### Siloxanes and Silicones, di-Me, hydroxy-terminated

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Oral)  
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Percutaneous)  
Quantitative Structure Activity Relation(QSAR)(residual)  
Quantitative Structure Activity Relation(QSAR)(Enrichment)

16.2 Date First 2017-09-01

#### 16.3 Revision number and date

Revision number 3 time  
Revision Date 2019-09-04

#### 16.4 Etc.

○ The MSDS (Material Safety Data Sheet) is edited or partially corrected by referring to the MSDS provided by KOSHA (Korea Occupational Safety and Health Agency)