Material Safty Data Sheet

Product	DHC1382(Part A)

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name	DHC1382(Part A)
1.2 Recommended use of the chemical and restrictions on use	
Recommended use of the product	Two Part, encapsulated sealant
Restrictions on use of the product	Not available
1.3 Company information	
Company Name	DAEHEUNG CHEMICAL CO., LTD.
Address	52, Sandan-ro15beon-gil,Pyeongtaeksi,Gyeonggi-do
Emergency telephone number	+82-031-663-5251

2. HAZARD IDENTIFICATION

2.1 Hazard, Risk classification	Skin corrosion/irritation : category 2
	Serious eye damage/eye irritating : category 2
	Hazardous to the aquatic environment, chronic toxicity : category 4
2.2 GHS label elements	
Symbol	

Signal word	Waring
Harmful Risk phrases	H315 Causes skin irritation
	H319 Causes serious eye irritation
	H413 May cause long lasting harmful effects to aquatic life
Precautions	
Prevention	P264 Wash thoroughly after handling.
	P273 Avoid release to the environment.
	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P302+P352 IF ON SKIN: Wash with plenty of soap and 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.
Corresponding	P321 Specific treatment (see ··· on this label).
	P332+P313 If skin irritation occurs: Get medical advice/attention.
	P337+P313 If eye irritation persists: Get medical advice/attention.
	P362+P364 Take off contaminated clothing and wash it before reuse
Storage	Not applicable
Disposal	P501 Dispose of contents and container in accordance with local regulations.
Amorphous, fumed silica	
Health	0
Fire	1
Reactivity	0
Aluminum hydroxide	
Health	0
Fire	No data
Reactivity	0
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	
Health	1
Fire	No data
Reactivity	0
Poly(dimethylsiloxane), vinyl terminated	
Health	1

Fire	1
Reactivity	0

3. COMPOSITION / INFORMATION ON INTEGREDIENTS

Name	Comon Name	CAS No	Contents(%)
Amorphous, fumed silica	Amorphous, fumed silica	112945-52-5	1 ~ 5
Aluminum hydroxide		21645-51-2	25 ~ 35
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	SILOXANES AND SILICONES, DI-ME, ME	68037-59-2	1 ~ 10
Poly(dimethylsiloxane), vinyl terminated	SILOXANES AND SILICONES,	68083-19-2	60 ~ 70

4. FIRST AID MEASURES

4.1 Eye contact	If it gets on your eyes, wash it carefully with water for a few minutes. If possible, remove contact lenses. Continue to wash.
	If eye irritation persists seek medical advice / advice.
4.2 In case of skin contact	If skin irritation develops, seek medical advice / advice.
	Remove contaminated clothing.
	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	Small fire: dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2
	Use dry sand or earth for digestion.
5.2. Special hazards arising from the substance or mixture	
Hazardous combustion products	During burning, pyrolysis or combustion can produce irritating and highly toxic gases.
	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
5.3. Advice for firefighters	
Amorphous, fumed silica	Extinguish the area and maintain safety distance.
	Be aware that it may be melted and transported.
	Drill ditches for the disposal of digestive waters to prevent them from being scattered.
	Move container from fire area if it is not hazardous.
	In case of tank fire, extinguish at maximum distance or use unmanned fire fighting equipment
	Cool containers with large amounts of water even after the fire has extinguished.
	In the event of a tank fire, the pressure relief device should be turned off if there is treble sound or the tank is discolored
	Tanks Fires in a fire.
	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
Aluminum hydroxide	Move container from fire area if it is not hazardous.

Aluminum hydroxide	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. 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 Get out of the tank when you fire
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	Move container from fire area if it is not hazardous. 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. 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.
Poly(dimethylsiloxane), vinyl terminated	Rescuers should wear appropriate protective equipment. Extinguish the area and maintain safety distance. Be aware that it may be melted and transported. Please note that some can be transported at high temperatures. Drill ditches for the disposal of digestive waters to prevent them from being scattered. Move container from fire area if it is not hazardous. In case of tank fire, extinguish at maximum distance or use unmanned fire fighting equipment 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 Get out of the tank when you fire 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

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, protective equipment and emergency procedures	Remove all ignition sources. Stop the leak if it is not dangerous. Ventilate contaminated areas. Cover with plastic sheet to prevent diffusion Prevent dust formation Note the substances and conditions to avoid
6.2. Environmental precautions	Do not discharge into the environment. 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. In case of a large leak, create a ditch by moving away from the liquid leak. Clean spills with clean shovel in a clean, dry container, loosely closed, then transfer container from leak area In case of powder leakage, cover with plastic sheet to prevent diffusion and keep dry In case of small spills, absorb with sand and non-combustible material and place in container

7. HANDLING AND STORAGE

7.1. Precautions for safe handling	Wash thoroughly after handling. 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.
	Be aware of the high temperature.
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	
Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data
ACGIH regulation	
Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data
Biological exposure standard	
Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data
8.2 Appropriate engineering controls	Equipment for storing and using this material must be worn and ready for use.
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	Flowable type
Color	Black
9.2 Odor	No data
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	1.2
9.15 N-octanol/water partition coefficient	No data
9.16 Autoignition temperature	No data
9.17 Decomposition Temperature	No data
9.18 Viscosity	Flowable
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
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	Stable at normal temperature and pressure Container may explode on heating Some can ride, but not easily ignite May cause irritation and poisonous gas in case of fire Inhalation of the substance may be harmful Some fluids may cause dizziness, suffocation-inducing vapors
Poly(dimethylsiloxane), vinyl terminated	Container may explode on heating
Poly(dimethylsiloxane), vinyl terminated	Some are burned but not easily ignited
Poly(dimethylsiloxane), vinyl terminated	Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes
Poly(dimethylsiloxane), vinyl terminated	May cause irritating, corrosive and toxic gases in case of fire

10.2 Conditions to avoid

Amorphous, fumed silica	Heat source, spark, flame, etc.
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	Heat source, spark, flame, etc.
Poly(dimethylsiloxane), vinyl terminated	Heat source, spark, flame, etc.

10.3 Substances to avoid

Amorphous, fumed silica	Combustible material, Reducing material
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	Combustible material Irritant, toxic gas
Poly(dimethylsiloxane), vinyl terminated	Combustible materials, reducing materials

10.4 Hazardous materials generated during decomposition

Amorphous, fumed silica	Corrosive / toxic fume
Amorphous, fumed silica	Irritating, corrosive, toxic gas
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	During burning, pyrolysis or combustion can produce irritating and highly toxic gases.
Poly(dimethylsiloxane), vinyl terminated	Corrosive / toxic fume
Poly(dimethylsiloxane), vinyl terminated	Irritating, toxic gas

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
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

11.2 Health hazard information

Acute toxicity

Oral

Amorphous, fumed silica	LD50 > 3100 ㎎/㎏ Rat
Aluminum hydroxide	LD50 > 2000 ㎎/㎏ Rat (Female, No Death (OECD TG 423, GLP))
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	LD50 16000 ㎎/㎏ Rat

Percutaneous

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	LD50 16000 ㎎/㎏ Rabbit

inhalation

Amorphous, fumed silica	No data
Aluminum hydroxide	Dust LC50 7.6 ㎎/ℓ 1 hr Rat (Male (OECD TG 403))
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Skin corrosive or irritant

Amorphous, fumed silica	No skin irritation reported
Aluminum hydroxide	No indication of irritation (OECD TG 404)
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	Probability of MOD/SEV = 1.000

Severe eye damage or irritation

Amorphous, fumed silica	No eye irritation reported
Aluminum hydroxide	No irritant (OECD TG 405, GLP) as a result of severe eye damage / irritation test using rabbit
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	Prob. of SEV Ocular Irritancy = 0.000(TOPKAT:Ocular Irritancy SEV vs MOD), Prob. of MLD Ocular Irritancy = 0.005(TOPKAT:Ocular Irritancy MLD vs NON)

Respiratory sensitization

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Skin sensitization

Amorphous, fumed silica	People are reported to have no skin irritability
Aluminum hydroxide	Skin sensitization test using guinea pig (male) showed non-irritability (OECD TG 406, GLP)
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Carcinogenicity

Industrial Safety and Health Act

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Notice of Ministry of Employment and Labor

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

IARC

Amorphous, fumed silica	Group 3 (Silica, amorphous)
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

OSHA

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

ACGIH

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

NTP

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

EU CLP

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Germ cell mutagenicity

Amorphous, fumed silica	No in vivo / in vitro test There was no evidence that this substance caused variation. Genotoxicity effects do not occur when exposed to this material.
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	Computed Probability of Mutagenicy = 0.547

Reproductive toxicity

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Specific target organ toxicity (single exposure)

Amorphous, fumed silica	Short-term exposure may cause respiratory irritation.

Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Specific target organ toxicity (repeated exposure)

Amorphous, fumed silica	showed normal lung reaction.
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

Inhalation hazard

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Fish

Amorphous, fumed silica	No data
Aluminum hydroxide	LC50 > 218.6441 ㎎/ℓ 96 hr Pimephales promelas (ASTM 2000,GLP)
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	LC50 0.021 mg / l 96 hr (not classified because water solubility is below 1 mg / L)

shellfish

Amorphous, fumed silica	No data
Aluminum hydroxide	LC50 22 ㎎/ℓ 96 hr (Gammarus sp.,)
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	LC50 0.024 mg / l 48 hr (not classified because water solubility is less than 1 mg / L).

algae

Amorphous, fumed silica	No data
Aluminum hydroxide	ErC50 0.0455 ~ 0.6999 ㎎/ℓ 72 hr (Pseudokirchneriella subcapitata (OECD Guideline 201))
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	EC50 0.085 mg / l 96 hr (not classified because water solubility is less than 1 mg / L)

12.2. Persistence and degradability

Persistence

Amorphous, fumed silica	No data
Aluminum hydroxide	log Kow -0.5304
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	log Kow 4.84 (Estimate)
Poly(dimethylsiloxane), vinyl terminated	log Kow 6.64

degradability

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

12.3. Bioaccumulation

Enrichment

Amorphous, fumed silica	No data
Aluminum hydroxide	BCF 3.162
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	BCF 723.4 (Estimate)
Poly(dimethylsiloxane), vinyl terminated	BCF 11200

Biodegradable

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	(Cut-off value=-0.2432 : Degradability(BIOWIN 5))

12.4. Soil mobility

Amorphous, fumed silica	No data
Aluminum hydroxide	No data
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl terminated	No data

12.5. Other harmful effects

Amorphous, fumed silica	No data
Aluminum hydroxide	Fish(Pimephales promelas), NOEC(7d)=1 156.5 μg/L Semi-static test (EPA 2002, GLP) shellfish(Ceriodaphnia dubia), EC50(7d)=250 μg/L ,Semi-static test (USEPA 2002) algae(Pseudokirchneriella subcapitata), NOErC(72h)≥ 4 μg/L ,static (OECD Guideline 201,GLP)
Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated	No data
Poly(dimethylsiloxane), vinyl 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 available
14.3. Transport hazard class(es)	Not available
14.4. Packing group	Not available
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 available
Emergency Action	Not available

15. REGULATORY INFORMATION

15.1 Regulation by the Industrial Safety and Health Act

Amorphous, fumed silica	No data
Aluminum hydroxide	Toxic substances to be managed
Aluminum hydroxide	Working environment Measured material (measurement cycle: 6 months)
Aluminum hydroxide	Special medical examination target substance (diagnosis period: 12 months)
Poly(dimethylsiloxane), vinyl terminated	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 applicable

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/OECDSIDS/silicates.pdf)(Specific target organ toxicity (single exposure))

Intermational 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)

Aluminum hydroxide

EPIWIN(Enrichment)

NITE, HSDB

Poly(dimethylsiloxane-co-methylhydrosiloxane), trimethylsilyl terminated

EPISUITE(Persistence)

EPISUITE(Enrichment)

EPISUITE(Soil mobility)

Poly(dimethylsiloxane), vinyl terminated

National Library of Medicine(http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM)(oral)

Registry of Toxic Effects of Chemical Substances(oral)

National Library of Medicine(http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM)(Percutaneous)

Registry of Toxic Effects of Chemical Substances(Percutaneous)

TOPKAT;Skin Irritation(Skin corrosive or irritant)

TOPKAT(Severe eye damage or irritation)

TOPKAT;Ames Mutagenicity(Germ cell mutagenicity)

Ecological Structure Activity Relationships(ECOSAR)(fish)

Ecological Structure Activity Relationships(ECOSAR)(shellfish)

Ecological Structure Activity Relationships(ECOSAR)(algae)

Quantitative Structure Activity Relation(QSAR)(Persistence)

Quantitative Structure Activity Relation(QSAR)(Enrichment)

EPI Suite(Biodegradable)

EPI Suite(Soil mobility)

16.2 Date First	2017-05-19
16.3 Revision number and date	
Revision number	0 time
Revision Date	0
16.4 Etc.	

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