

REMITITE CO.,LTD
Material Safety Data Sheets (MSDS)

Page : 1/6

Last revised date : 2020/10/05

REMITITE Fire Retardant Silicone Sealant : Si-701

Product Name

REMITITE Si-701

1. Product and Company Identification

A. Product Name	REMITITE Si-701
B. Recommended use of the product and limitations in use	
Recommended use of the product	Fire Retardant Silicone Sealant
Limitations in use	Not Applicable
C. Information on the Company	
Company Name :	REMITITE CO., LTD.
Address :	109-30 Yongdeok-ro, 23 Beon-gil, Hallim-myeon, Gimhae-si, Gyeongsangnam-do 50853 Korea
Telephone number for emergency :	055-336-9273~4

2. Hazards Identification Including Emergency Overview

A. Hazard and Danger Class & Category	Skin Corrosion/Skin Stimulus : class2 Eye Corrosion/Skin Stimulus : class2 Skin irritability : class1 Specific target organ toxicity(once exposure) : class3 (Respiratory stimulation) Specific target organ toxicity(repeated exposure) : class2 Skin irritability : class1 Skin irritability : class1 Skin irritability : class1
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B. Warning Signs and Precautionary statements



Warning Signs

Danger! According to the classification in REACH registrations and CLP notification, this substance cause serious eye damage, is harmful if inhaled and may cause an allergic skin reaction.

Sign Meaning

Danger

Hazard and danger statements

H315 May cause an skin stimulation.
H317 May cause an allergic skin irritation.
H319 Causes eye irritation
H335 May cause an respiratory stimulation.

Precautionary statements

Precaution

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 After treatment, wash treatment part thoroughly.
P271 handle outdoors or in well ventilated areas
P272 Do not take the contaminated cloths out.

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

Response

P302+352 Wash with plenty of soap and water, if on skin.

P304+P340 Transfer to fresh air when inhaled and rest in an easy-to- breathe position.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
P312 Get medical attention if you feel uncomfortable.
P314 Get medical care or advise if you feel uncomfortable.
P321 Specific treatment.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

Storage
Store in room temperature.

Disposal
P501 (As specific in the relevant legislation) Dispose of the container contents.

C. Other Hazards (NFPA)

CARBONIC ACID, CALCIUM SALT

Health	2
Fire	0
Reactivity	0

POLYDIMETHYLSIOXANE

Health	1
Fire	1
Reactivity	0

DIMETHYL(POLYSILOXANE)

Health	1
Fire	2
Reactivity	0

N-(3-TRIMETHOXYSILYL)PROPYL-1

Health	3
Fire	1
Reactivity	1

3. Composition abd Information on Ingredients

Ingredient Name	CAS No.	Content %(W/W)	Hazard and Caution
CARBONIC ACID, CALCIUM SALT	471-34-1	19 – 27	Not hazardous
Polydimethylsiloxane	63148-62-9	19 – 27	Not hazardous
Dimethly Polysiloxane	70131-67-8	19 – 27	Not hazardous
N-(3-TRIMETHOXYSILYL)PROPYL-1	1760-24-3	3 – 7	Not hazardous
Distillates (petroleum), hydrotreated light	64742-47-8	12 – 40	Not hazardous

4. First Aid Measures

A. In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical care or advice.
B. In case of skin contact	Wash skin with plenty of sopa and water. If skin irritation or rash occurs, get medical advice/attention. Remove/take off and quarantine all contaminated clothing or shoes. Before reuse, wash and clean clothing or shoes. When matter, immediately take medical measure or get medical advise/attention.
C. If inhaled	If you cough or other symptoms, please seek medical advise/attention. Remove with clean air or move to the area with fresh air. If no breathing, give artificial respiration and use proper respiratory medical equipment. If breathing is difficult, give oxygen.
D. If swallowed	Do not let the unconscious patient eat anything. Immediately take medical measure or get medical advise/attention.
E. Other matters in medical attention	Let medical staff recognize relevant materials and take protective action. Do not administer Adrenergic agents.

5. Fire Fighting Measures

A. Appropriate(inappropriate) extinguishing media	Use alcohol foam, CO2, or water spray to extinguish fire related to this ingredient. Use dry sand or soil if extinguishing by asphyxia. Small fire: Dry sand, Alcohol resistant foam, Water spray, Normal foam, CO2 (appropriate extinguisher) Large fire: Water spray/mist, Normal foam (appropriate extinguisher) High injection water spray (inappropriate extinguisher)
B. Special hazards coming from chemicals	Fire may produce irritating gas & smoke Some may burn but may not ignite easily Inhalation of material may be harmful Some liquids are dizzying, may cause vapor that causes suffocation
C. Protective equipment and preventive measures in fire fighting	If it is not dangerous, move the container from the fire area. Some may be carried at high temperatures Leaks may cause contamination May cause burns to the skin and eyes on contact Dig a ditch to dispose of the digestive water and lock it up so that the substance does not dissipate.

6. Accidental Release Measures

A. Measures and protective equipment necessary to protect the human body	Avoid inhaling (dust, fume, gas, mist, steam, spray).
	Clean any spillage immediately and follow the precautions in the Protector section.
	Remove all Ignition sources.
	Be aware of the substances and conditions to be avoided.
B. Measures necessary to protect the environment	Stop the leak if it's not dangerous.
	Ventilate the contaminated area.
	Prevent dust formation.
	Do not discharge into the environment.
C. Purification or Removal	Keep out of the channel.
	Prevent entry into the waterway, sewer, basement, or sealed area.
	Absorb spilled substances (e.g., dry sand or soil) from inert ingredients and place them in chemical waste containers.
	Collect the leak.
	In case of small leaks, wash off the contaminated area with plenty of water.
	In the event of small leaks, absorb the sand and non-flammable substances and place them in a container.
	In the event of a large quantity of leakage, make a drain far away from the liquid leakage.
	Place the leak in a clean, dry container with a clean shovel and loosely close and remove the container from the leak area

7. Handling and Storage

A. Safe handling tips	Avoid inhaling (dust, fume, gas, mist, steam, spray).
	Wash the area thoroughly after handling.
	Do not bring contaminated clothing out of the workplace.
	Please follow all MSDS/Label precautions as product debris may remain even after the container is emptied.
	Avoid prolonged or sustained skin contact.
	Be aware of the substances and conditions to be avoided.
	Handle and wash thoroughly.
	Refer to engineering management and personal protective equipment to work.
B. Safe storage	Watch out for high temperatures.
	Check the oxygen concentration before entering the relevant location.
	Storage at room temperature avoiding a direct ray of light.

8. Exposure Control & Personal Protection

A. Exposure standards, ecological exposure standards, etc. of chemicals	
Domestic Regulation	No Data
ACGIH Regulation	No Data
Ecological exposure standards	No Data
B. Appropriate engineering management	
Install eye washing and safety shower for facilities that store or use foreign substances.	
C. Personal protective equipment	
Respiratory protection	Wear breathing apparatus certified by the Korea Occupational Safety and Health Corporation for the physical and chemical properties of the exposed material.

9. Physical & Chemical Properties

A. Appearance	
Shape	Silicone sealant
Color	Various
B. Odor	
Slight odor	
C. Density	1.0 ~ 1.3 g/cm ³
D. Viscosity	Non slump Paste
E. Asbestos	None
F. Service Temperature	-55 ~ 250℃

10. Stability & Reactivity Data

A Possibility of chelal stability and hazardous reactions	Safe at room temperature and pressure
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	Some may burn but may not ignite easily
	May cause irritation gas in case of fire
	Inhalation of material may be harmful
	Some liquids are dizzying, may cause vapor that causes suffocation
B. conditions to avoid	Sources of ignition, such as heat, spark, and flame
C. Materials to avoid	Combustible material
	Irritant, toxic gas
D. Hazardous materials generated by decomposition	Heat decomposition or combustion during burn can produce highly toxic gas
11. Toxicological Information	
A. Information on highly possible exposure routes	Absorbable by inhalation
	Absorption of the body by inhalation and digestive organ system
	Absorption of the body through skin, through digestive organ system, and through inhalation of aerosols
	Absorption of the body by inhalation of steam
B. Information on health hazards	
Acute toxicity	Not available
Carcinogenicity Classification	Not available
12. Ecological Information	
A. Environmental effects	No known significant effects or critical hazards
13. Disposal Considerations	
A. Disposal method	The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
14. Transport Information	
A. UN No.	Not regulated
B. DOT Classification	Not regulated
C. TDG Classification	Not regulated
D. ADR/RID Class	Not regulated
E. IMDG Class	Not regulated
F. IATA-DGR Class	Not regulated
15. Regulatory Information	
A. Regulation by Occupational Safety and Health Act	No Data
B. Regulation by Toxic Chemical Substance Control Act	No Data
C. Regulation by Safety Control of Dangerous Substances Act	No Data
D. Regulation by Wastes Control Act	No Data
CARBONIC ACID, CALCIUM SALT	No Data
POLYDIMETHYLSILOXANE	Designated waste
DIMETHYL(POLYSILOXANE)	No Data
N-(3-(TRIMETHOXSILYL)PROPYL)-1	Designated waste
E. Regulation by other domestic and foreign laws	
Domestic regulation	
Persistent Organic Pollutants Control Act	Not applicable
Foreign regulation	
US Management Information (OSHA Regulation)	Not applicable
US Management Information (CERCLA Regulation)	Not applicable
US Management Information (EPCRA 302 Provision)	Not applicable

US Management Information (EPCRA 304 Provision)	Not applicable
US Management Information (EPCRA 313 Provision)	Not applicable
US Management Information(Rotterdam Convention Material)	Not applicable
US Management Information(Stockholm Convention Material)	Not applicable
US Management Information(Montreal Protocol Material)	Not applicable
EU Classification Information(Confirmed Classification)	Not applicable
EU Classification Information(Hazard Statements)	Not applicable
EU Classification Information(Safety Statements)	Not applicable

16. Other Information

A. Sources

CARBONIC ACID, CALCIUM SALT

ICSC(Feature)

ECHA(Color)

ICSC(Odor)

HSDB(pH)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)(Melting Point/Freezing Point)

ICSC(Ignition Point)

ICSC(ignitability)

ICSC(Ignition or explosion range)

ICSC(Solubility)

Calculation by molecular weight and average molecular weight of air (wave. vapor density)

ECHA(Specific Gravity)

ICSC(Self-ignition Temperature)

ChemIDplus(Molecular weight)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)(Oral)

International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)(Skin corrosion or irritation)

International Uniform Chemical Information Database(IUCLID)(Severe eye damage or irritation)

National Library of Medicine/Chemical Carcinogenesis Research Information System (NLM/CCRIS)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CCRIS>)(Reproductive cell mutation)

ECOTOX(Fish)

Ecological Structure Activity Relationships(ECOSAR)(Birds)

Quantitative Structure Activity Relation(QSAR)(Concentration)

Quantitative Structure Activity Relation(QSAR)(Soil mobility)

The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>)

N-[3-(TRIMETHOXSILYL)PROPYL]-1

OECD 401, EEC 67/548 1967)-79/831, OECD SIDS(Oral)

OECD SIDS(Intradermal)

OECD TG 404 ,OECD SIDS(skin corrosive or irritant)

OECD TG 405 OECD SIDS(severe eye damage or irritation)

OECD TG406, OECD SIDS (1992)(Dermatological sensitivities)

EPA Health Effect Test Guidelines, EPA Report 560/6-83-001, OECD SIDS(Genetic cell mutagenicity)

EPA Health Effects Test Guidelines, OEC SIDS(Genetic cell mutagenicity)

OECD TG 471, Directive 84/449/EEC(Genetic 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(Birds)

OECD SIDS(Biodegradable)

(Polydimethylsiloxane)

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Shape)

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Initial boiling point and range)

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Printing shop)

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Weight)

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Molecular weight)

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>)(Intradermal)
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)(Fish)
The ECOTOXicology database (ECOTOX)(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>)
(DIMETHYL(POLYSILOXANE))

Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Shape)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Color)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Smell)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Melting point / freezing point)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(nitial boiling point and boiling point range)
Sigma Aldrich(Iginition point)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Vapor pressure)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Weight)
Quantitative Structure Activity Relation(QSAR)(n-octanol / water partition coefficient)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Auto ignition temperature)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Viscosity)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Oral)
Corporate Solution From Thomson Micromedex(<http://csi.micromedex.com>)(Intradermal)
Quantitative Structure Activity Relation(QSAR)(Biodegradable))
Quantitative Structure Activity Relation(QSAR)(Soil mobility)

B. First written on	2017-04-13
C. No. of revisions & Final revision date	
No. of revisions	4 Time
Final revision date	2020-10-05
D. Others	

☐ The above Material Safety Data Sheet was written after reference to and edition and some change of the MSDS provided Korea Occupational Safety and Health Agency.