

1. Chemical product and company identification

Substance name : CHALINE LC-190

Recommended use of the chemical and restrictions on use

Recommended use : Glidant

Restrictions on use : General industrial use

Company information

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2. Hazards identification

GHS classification

Physical hazards	Explosives	classification not possible
	Flammable gases	No classification
	Aerosol	classification not possible
	Oxidizing gases	No classification
	Gases under pressure	No classification
	Flammable liquids	classification not possible
	Flammable solids	No classification
	Self-reactive substances and mixtures	classification not possible
	Pyrophoric liquids	classification not possible
	Pyrophoric solids	No classification
	Self-heating substances and mixtures	classification not possible
	Substances and mixtures which in contact with water emit flammable gases	classification not possible
	Oxidizing liquids	classification not possible
	Oxidizing solids	No classification
	Organic peroxides	classification not possible
	Corrosive to metals	classification not possible
	Desensitized explosives	classification not possible
Health hazards	Acute toxicity (oral)	classification not possible
	Acute toxicity (dermal)	classification not possible

Environmental hazards	Acute toxicity (inhalation:gas)	No classification
	Acute toxicity (inhalation:vapours)	No classification
	Acute toxicity (inhalation:dust/mist)	classification not possible
	Skin corrosion/irritation	classification not possible
	Serious eye damage/eye irritation	classification not possible
	Respiratory sensitization	classification not possible
	Skin sensitization	classification not possible
	Germ cell mutagenicity	classification not possible
	Carcinogenicity	classification not possible
	Reproductive toxicity	classification not possible
	Specific target organ toxicity (single exposure)	classification not possible
	Specific target organ toxicity (repeated exposure)	classification not possible
	Aspiration hazard	classification not possible
	Hazardous to the aquatic environment, short-term (acute)	classification not possible
	Hazardous to the aquatic environment, long-term (chronic)	classification not possible
	Hazardous to the ozone layer	classification not possible

Precautionary statements

Prevention	: Avoid release to the environment. (P273) Wear protective gloves, protective clothing, eye protection, face protection. (P280)
Response	: Get medical advice/attention if you feel unwell. (P314)
Storage	: Store in a well-ventilated place. Keep cool. (P403+P235)
Disposal	: Dispose of contents/container in accordance with local/regional/national/international regulations. (P501)

3. Composition/information on ingredients

Distinction of substance or mixture	: Mixture
Generic name	: Colloidal dispersion of Silicone-Acrylate based copolymer

Name	Concentration (%)	Reference number in the gazette list		CAS-No.
		CSSL No	ISHL No	
Silicone-Acrylate based copolymer	42 – 45	Undisclosed	Undisclosed	Undisclosed
Cyclotetrasiloxane, octamethyl- (Impurity)	2.8	(7)-475	Existing Chemical Substance	556-67-2
Cyclopentasiloxane, decamethyl- (Impurity)	< 2	(7)-475	Existing Chemical Substance	541-02-6
Dodecamethylcyclohexasiloxane (Impurity)	< 1	(7)-475	Existing Chemical Substance	540-97-6
Water	54 – 57	-	-	7732-18-5

4. First aid measures

First aid measures

- First-aid measures general : Get medical advice/attention if you feel unwell.
- First-aid measures after inhalation** : Remove the sufferers to fresh air places and keep themselves rest in an easy-to- breath position. Get medical advices immediately.
If breathing has stopped or is labored, give artificial respiration.
- First-aid measures after skin contact** : Take off contaminated clothes, shoes and socks. And wash sticking parts off with soap and plenty of water. If the external changes are observed or the symptoms such as irritation or itchy appears, get medical advices immediately.
- First-aid measures after eye contact** : Rinse immediately inner side of eyelid with plenty of water more than 20 minutes. Remove the contact lenses if possible. Get medical advices.
- First-aid measures after ingestion** : Rinse mouth thoroughly with water and get medical attention immediately.
Never give anything through mouth to an unconscious person.

5. Fire fighting measures

- Suitable extinguishing media** : Water and alkali salt, Fire foam, Water, Dry chemical
- Unsuitable extinguishing media** : Nothing in particular

Fire hazard

- Fire hazard : This product itself is not a flammable compound. But dry film after evaporating water is flammable.

Hazardous decomposition products in case of fire : The hazardous gasses such as carbon mono- and di-oxide and aldehyde group are generated at the Product's combustion.

Firefighting instructions

Firefighting instructions : Cut off ignition sources to a fire origin and fight a fire employing a suitable fire extinguishing agent.
Cool by water spray around the fire site to prevent the fire extension.

Personal protection (Emergency response)

Personal protection (Emergency response) : Fight a fire from the windward and wear a self-contained breathing apparatus according to circumstances.

Other information : One of the general procedures for chemical fires may be applied. Use appropriate extinguishing measures considering the local circumstances and environments. Never inhale such smoke, etc. as are generated at fire and/or explosion. Use water spray to cool unopened containers. Recover the water contaminated with fire extinguishing agents separately. Never discharge this water into drains. Fire residues and contaminated fire extinguishing water must be disposed of complying with local regulations.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General measures : Wear a self-contained breathing apparatus and suitable chemical protective clothes and tools, and work from windward.

For emergency responders

Protective equipment : Wear suitable protective tools such as goggles, boots, gloves, body suits and a self-contained breathing apparatus according to circumstances to avoid inhalation of and direct contact with materials in question.

Emergency procedures : Clear off all of ignition sources immediately.
Work from windward.
Stop release.

Environmental precautions

Environmental precautions : Recover immediately and prevent spreading.

Methods and Equipment for Containment and Cleaning up

For containment : When the releasing materials are large, prevent spreading by cover with banking and the like and vacuum and recover with a pump, etc.
When the releasing materials are small, recover as mortar after

	mix with perlite, dirt, sawdust and/or the like.
Methods for cleaning up	: Clean up the surroundings of the releasing area with water after recovery and recover the contaminated water as well.
Prevention Measures for Secondary Accidents	: If the products spill into rivers, lakes or marshes, inform to the fire stations, authorities relating environment disruption, River Bureau, Water Supply Bureau, etc. of local governments, if necessary.
Other information	: Take care of slip as released area becomes easy to slip.

7. Handling and storage

Handling

Technical measures	: As polyvalent metal ions such as iron, copper, zinc, aluminum, etc. may cause collering, gelling, etc, pay care and attention for choice of storage installations, pipework, blenders and the like.
Precautions for safe handling	: Wear suitable personal protecting tools such as protecting gloves, protecting glasses, etc. according to circumstances to avoid to contact with skin or eye(s). See section 8 for personal protection. Never inhale vapours or spray mist. Avoid contact with skin and eyes. Use appropriate containers to avoid environmental contamination.
Prevents handling of incompatible substances or mixtures	: No information.
Hygiene measures	: Wash hands at the end of each work shift before eating, smoking or using the toilet. Never eat, drink nor smoke during work.
Local and general ventilation	: In case of the work with generation of spray mist or vapor, install local air exhausters.

Storage

Storage conditions	: Storage temperature must be kept not less than 5°C and never exceed 35°C. Store indoor, preventing from sunlight and freezing. Avoid dust, water, etc. coming into opened containers in use.
Material used in packaging/containers	: Use the containers having water resistance and durability, and avoid from contact with metals as possible.
Technical measures	: Keep containers stoppled tightly after use to prevent forming film.
Incompatible materials	: Strong oxidizers. Reactive metals. (sodium,calcium, zinc, etc.). Dehydrating agent.

8. Exposure controls / Personal protection equipment

CHALINE LC-190	
Japan - Occupational Exposure Limits	
Japan administration level	No data available
Exposure limits (JSHO)	No data available
Exposure limits (ACGIH)	No data available

Appropriate engineering controls : Install sealing equipments or local exhaust equipments at indoor work, Express the place clearly where safety shower(s) and hand and eye washer(s) are equipped.

Protective equipment

Respiratory protection : Use respirators for filtering air etc. to avoid inhalation.

Hand protection : Wear protective gloves.(Neoprene Nitrile rubber)

Eye protection : goggles style protective glasses

Skin and body protection : Protective clothes(long sleeve clothes).

9. Physical and chemical properties

Physical state	: Liquid
Colour	: milky
Odour	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: $\approx 100\text{ }^{\circ}\text{C}$
Flash point	: nothing
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: ≈ 1.1
Density	: No data available
Relative gas density	: No data available
Solubility	: Miscible with water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Explosive limits (vol %)	: No data available

Explosive limits (g/m ³)	: No data available
Viscosity, kinematic	: No data available
Minimum ignition energy	: No data available
Particle size	: No data available

10. Stability and reactivity

Reactivity	: No reactivity with water
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No information
Conditions to avoid	: No information
Incompatible materials	: No information
Hazardous decomposition products	: No information

11. Toxicological information

Acute toxicity (oral)	: (as a product)	No data available
Acute toxicity (dermal)	: (as a product)	No data available
Acute toxicity (gas) - Description	: (as a product)	No data available
Acute toxicity (vapour) - Description	: (as a product)	No data available
Acute toxicity (dust, mist) - Description	: (as a product)	No data available
Acute toxicity (mist) - Description	: (as a product)	No data available
Skin corrosion/irritation	: (as a product)	No data available
Serious eye damage/irritation	: (as a product)	No data available
Respiratory sensitization	: (as a product)	No data available
Skin sensitization	: (as a product)	No data available
Germ cell mutagenicity	: (as a product)	No data available
Carcinogenicity	: (as a product)	No data available
Reproductive toxicity	: (as a product)	No data available
STOT-single exposure	: (as a product)	No data available
STOT-repeated exposure	: (as a product)	No data available
Aspiration hazard	: (as a product)	No data available

12. Ecological information

Ecotoxicity

Ecotoxicity	: (as a product)	No data available
Hazardous to the aquatic environment, short-term (acute)	: (as a product)	No data available
Hazardous to the aquatic environment, long-term (chronic)	: (as a product)	No data available

Persistence and degradability

Persistence and degradability	: (as a product)	No data available
Biochemical oxygen demand (BOD)	: (as a product)	No data available
Chemical oxygen demand (COD)	: (as a product)	No data available

Bioaccumulative potential

Bioaccumulative potential	: (as a product)	No data available
Partition coefficient n-octanol/water (Log Pow)	: (as a product)	No data available

Mobility in soil

Mobility in soil	: (as a product)	No data available
Partition coefficient n-octanol/water (Log Pow)	: (as a product)	No data available
Ecology - soil	: (as a product)	No data available

Hazardous to the ozone layer

Ozone	: (as a product)	No data available
Other adverse effects	: No additional information available	

13. Disposal considerations

Ecological waste information	: At disposal of wastes, comply with the Waste Management and Public Cleansing Law. Farm out to professional disposal treating traders in compliance with requirements of the nation and local governments.
Contaminated container and packaging	: Farm out dispose of the contents and packing materials to professional disposal treating traders in compliance with

requirements of the nation and local governments.

In case of disposal of empty container, dispose after complete removal in the container.

14. Transport information

International Regulations

Transport by sea(IMDG)

UN-No. (IMDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Packing group (IMDG)	: Not applicable
Transport hazard class(es) (IMDG)	: Not applicable

Air transport(IATA)

UN-No. (IATA)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Packing group (IATA)	: Not applicable
Transport hazard class(es) (IATA)	: Not applicable

Regulations in Japan

Other information	: At transportation, make sure of no leakage of packings, load the products without broken bags, falling, injury, etc, and prevent load collapses surely, See "7 Handling and storage"
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15. Regulatory information

REACH SVHC	: Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$: Cyclotetrasiloxane, octamethyl- (EC 209-136-7, CAS 556-67-2), Decamethylcyclopentasiloxane (CAS 541-02-6), Dodecamethylcyclohexasiloxane (CAS 540-97-6)
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16. Other information

Data sources	: Ref. 1."Safety Data Sheet" by Raw Material Manufacturers. 2.GHS Sixth Revised Edition. 3.NITE GHS Results of the Classification.
Other information	: The Products was developed for general industries' use. When applying to specific uses, it is hoped to confirm its safety by yourselves prior to the use. Prior to use or handle of this products, keep all people who handle this product informed of

the information of this SDS and other information concerning safety and disasters. The description of this SDS is based upon materials, information and data which can be procured at present. However, we do not warrant any guarantee regarding the contents, physical and chemical properties, hazards and the like.

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