

Safety Data Sheets

1. Identification

Product name :Silicon standard solution 1000mg/L

Name of supplier :JUNSEI CHEMICAL CO., LTD.

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Product code(SDS NO) :29090jis_J_E1-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

(Note) GHS classification without description : Not applicable/Out of classification/Not classifiable

3. Composition/information on ingredients

Substance/Preparation :Preparation

Ingredient name:Disodium metasilicate

content(%):ca. 0.44

Chemical formula:Na₂O₃Si

Chemicals No, Japan:1-508

CAS No.:6834-92-0

MW:122.06

ECNO:229-912-9

Ingredient name:Sodium carbonate

content(%):ca. 2.1

Chemical formula:CNa₂O₃

Chemicals No, Japan:1-164

CAS No.:497-19-8

MW:105.99

ECNO:207-838-8

Ingredient name:Water

content(%):Residual quantity of the ingredient mentioned above

Chemical formula:H₂O

CAS No.:7732-18-5

MW:18.02

ECNO:231-791-2

4. First-aid measures

IF INHALED

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

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IF ON SKIN(or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES :

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.
The product is non-flammable.

Specific hazards arising from the chemical

Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.
Wear cold insulating gloves/face shield/eye protection.
Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.
Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean, groundwater.

Methods and materials for neutralization, containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire & explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.
Avoid contact with eyes.
Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Wear protective gloves, protective clothing or face protection.
Use personal protective equipment as required.
When using do not eat, drink or smoke.

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Conditions for safe storage, including any incompatibilities

Recommendation for storage

- Keep container tightly closed.
- Keep cool . Protect from sunlight.
- Store in well-ventilated place.

8. Exposure controls/personal protection

Appropriate engineering controls

- Do not use in areas without adequate ventilation.
- Eye wash station should be available.
- Washing facilities should be available.

Protective equipment

Respiratory protection

- Wear positive pressure self-contained breathing apparatus (SCBA).

Hand protection

- Wear protective gloves.

Eye protection

- Wear eye/face protection.

9. Physical and Chemical Properties

Physical properties

- Appearance :liquid
- Color :colorless
- Odor :None
- pH :Basic

Phase change temperature

- Initial Boiling Point/Boiling point data N.A.
- Melting point/Freezing point data N.A.
- Decomposition temperature data N.A.
- Flash point data N.A.
- Auto-ignition temperature data N.A.
- Explosient data N.A.
- Vapor pressure data N.A.
- Vapor density data N.A.
- Specific gravity/Density data N.A.
- Solubility
- Solubility in water :miscible
- n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Stability

- Stable under normal storage/handling conditions.

Possibility of hazardous reactions

- Reacts with acids to generate carbon dioxide.

Conditions to avoid

- Contact with incompatible materials.
- Heat.

Incompatible materials

- Strong acids

Hazardous decomposition products

- Carbon oxides, Silicon compounds

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Oral component(s) data

(Sodium carbonate) rat LD50=2800 mg/kg (SIDS, 2002)

(Disodium metasilicate) rat LD50 =600 mg/kg (SIDS, 2004)

Inhalation toxicity component(s) data

(Sodium carbonate) mist : rat LC50=1.2 mg/L/4hr (SIDS, 2002)

Irritant properties

Skin corrosion/irritation

(Sodium carbonate) rabbit 500 mg/24H ; MILD(RTECS)

(Disodium metasilicate) rabbit 250 mg/24H ; SEVERE(RTECS)

Serious eye damage /irritation

(Sodium carbonate) rabbit 100 mg/24H ; MODERATE(RTECS)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

No Carcinogenic effects data available

No Toxicity for reproduction data available

No Aspiration hazard data available

Additional data

There are no data available on the preparation itself.

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Sodium carbonate) Crustacea (Daphnia) EC50=250mg/L/48hr (SIDS, 2002)

(Disodium metasilicate) Fish (Danio rerio) LC50=210mg/L/96hr (IUCLID, 2000)

Water solubility

(Sodium carbonate) 0.53 g/100 ml (PHYSPROP Database 2008)

(Disodium metasilicate) > 200 g/L (IUCLID, 2000)

No Persistence and degradability data available

No Bioaccumulative potential data available

Additional data

There are no data available on the preparation itself.

13. Disposal Considerations

Disposal methods

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

Not applicable to UN NO.

Act on Prevention of Marine Pollution and Maritime Disaster

Noxious Liquid ; Cat. Z···Sodium carbonate

Non Noxious Liquid ; Cat. OS···Water

15. Regulatory Information

The product is not applicable to GHS classifications.

US major regulations

TSCA

Sodium carbonate; Disodium metasilicate; Water

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012) 2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2014 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

Supplier's data/information

Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013,METI)

Other information

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current EU official data