

date of issue: February 27, 2015

Safety Data Sheet

1. Product and Company

Identification

Product name: CO₂ ABSORBER (L), Shimadzu Part Number: 630-00999-00
Name of supplier: SASAKI CHEMICAL CO., LTD.
Address: 10 KANSHUJI, NISHIKITADE-CHO, YAMASHINA-KU, KYOTO-SHI, KYOTO, JAPAN
Division: Quality control division
Phone: +81-75-581-9141
FAX: +81-75-593-9784
Product code (SDS NO): 81785E1-1

2. Hazards Identification

GHS classification and label elements of the product

GHS classification

HEALTH HAZARDS

Skin corrosion/irritation: Category 2
Serious eye damage /eye irritation: Category 1
Specific target organ toxicity-single exposure: Category 1
Specific target organ toxicity-repeated exposure: Category 2

Signal word: Danger



HAZARD STATEMENT

Causes skin irritation.
Causes serious eye damage.
Causes damage to organs after single exposure.
May causes damage to organs following repeated exposure.

PRECAUTIONARY STATEMENT

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.
Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves.
Wear face protection.

Response

Immediately call a POISON CENTRE or doctor/physician.
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash before reuse.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
If skin irritation occurs: Get medical advice/attention.

Disposal

Dispose of contents/container to according to local requirement.

3. Composition/Information on Ingredients

Substance/Preparation: Preparation

Ingredient name	Content (%)	CAS No.	PRTR law No, Japan
Calcium hydroxide	≥9.00	1305-62-0	-
Potassium hydroxide	2.00	1310-58-3	-
Sodium hydroxide	1.00	1310-73-2	-
Silica, amorphous	2.00	112926-00-8	-

4. First-Aid Measures

General procedures

Immediately call a POISON CENTRE or doctor/physician.

Get medical attention/advice if you feel unwell.

IF INHALED

Get immediate medical attention/advice.

IF ON SKIN

Wash with plenty of soap and water.

If skin irritation 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 SWALLOWED

Seek medical advice immediately and show container, label or this SDS.

5. Fire-Fighting Measures

Suitable extinguishing media

water jet

Specific hazards arising from the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Cool container with water spray.

Special protective equipment and precautions for fire-fighters

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.

Evacuate area.

Wear proper protective equipment.

PUBLIC SAFETY: Ventilate closed spaces before entering.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Do not wash away into shower or waterway.

Avoid raising dust.

Methods and materials for neutralization, containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Fill the disposal into labelled, closable containers.

7. Handling and Storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapours/spray.

Safety Measures/Incompatibility

Wear protective gloves.

Wear eye protection/face protection.

8. Exposure Control/Personal Protection

Control parameters e.g. occupational exposure limit values or biological limit values Adopted value

(Calcium hydroxide)

ACGIH (1979) TWA: 5mg/m³ (Eye, URT & skin irritant)

(Potassium hydroxide)

ACGIH (1992) STEL: C 2mg/m³ (URT, eye & skin irritant)

(Sodium hydroxide)

ACGIH (1992) STEL: C 2mg/m³ (URT, eye & skin irritant)

Safety and Health measures

Wash ... thoroughly after handling.

Do not eat, drink or smoke when using this product.

Take off contaminated clothing and wash before reuse.

9. Physical and Chemical Properties

Physical properties

Appearance: Pellet

Color: white

Solubility

Solubility in water: slightly soluble

10. Stability and Reactivity

Stability

Absorbs carbon dioxide from air.

If heated,,it will decompose and form into calcium oxide.

Possibility of hazardous reactions

In presence of water, it will attack most of the metals and release flammable/explosive gas.

Conditions to avoid

Contact with air heating.

Incompatible materials

Acids, Strong oxidizing agents

Hazardous decomposition products

Calcium oxide

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

Acute toxicity

Oral toxicity component(s) data

(Potassium hydroxide)

rat LD50=284mg/kg (cal.)

Irritant properties

Skin corrosion/Irritation component(s) data

(Potassium hydroxide)

rabbit 50 mg/24H ; SEVERE

(Sodium hydroxide)

rabbit 500 mg/24H ; SEVERE

Serious eye damage /irritation

Eye damage/irritation component(s) data

(Potassium hydroxide)

rabbit 1 mg/24H rinse ; MODERATE

(Sodium hydroxide)

rabbit 0.4mg ; MILD rabbit 50μ g/24H ; SEVERE

(Calcium hydroxide)

rabbit 10 mg ; SEVERE

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

Delayed and immediate effects and also chronic effects from short- and long-term exposure

Specific target organ toxicity (single exposure cat.1)

(Calcium hydroxide) respiratory apparatus/system

Specific target organ toxicity (single exposure cat.2)

(Potassium hydroxide) respiratory apparatus/system

(Sodium hydroxide) respiratory apparatus/system (PATTY (5th, 2001))

Specific target organ toxicity (repeated exposure cat.2)

(Calcium hydroxide) lung

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

Aquatic toxicity

(Sodium hydroxide)

Crustacea (Ceriodaphnia reticulata) LC50=40.4mg/L/48hr (SIDS, 2004)

Water solubility

(Calcium hydroxide)

none (ICSC, 1997)

(Potassium hydroxide)

110 g/100 ml (25 C) (ICSC, 2000)

(Sodium hydroxide)

109 g/100 ml (20 C) (ICSC, 2000)

No Persistence and degradability data available

No Bioaccumulative potential data available

13. Disposal Considerations

Waste residues

- Dispose of contents/container in accordance with local/national regulation
- Dispose to an authorized waste collection point.
- Do not dump into sewers, on the ground or into any body of water.
- Use appropriate containment to avoid environmental contamination.

Contaminated packing

- This container can be recovered for reuse or recycling after cleaning.

14. Transport Information

UN No., UN CLASS

No applicable UN NO.

Sea pollutant

Sea pollutants control law

- Noxious Liquid; Cat. Y: Potassium hydroxide; Sodium hydroxide
- Noxious Liquid; Cat. Z: Calcium hydroxide

15. Regulatory Information

16. Other Information/References

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (3rd ed., 2009), UN SDS & Labelling guide book (rev. 1st ed., Mar 2007), JPMA

Recommendations on the TRANSPORT OF DANGEROUS GOODS 17th edit. UN Classification, labelling and packaging of substances and mixtures (reg.(EC) No 1272/2008) 2008 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2011 TLVs and BEIs. (ACGIH) <http://monographs.iarc.fr/monoeval/grlist.html> JIS Z 7250 2010

Supplier's SDS Other information

The information relates to this specific material. It may not be valid for this material, if used in combination with any other materials or in any process. It is the user's responsibility to satisfy him-selves as to the suitability and completeness of th

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 test

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.