

# MATERIAL SAFETY DATA SHEET SDS/MSDS

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Lithium Carbonate

CAS-No. : 554-13-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Bio-Chem Chemicals

5455 NicholsonRoad, Science Market Ambala Cantt, 133001 - Haryana

+91 82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No

1272/2008 Acute toxicity, Oral (Category 4), H302

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

rning Skin irribation

Signal word

Hazard statement(s)

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Precautionary statement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

none

Statements

#### 2.3 Other hazards - none

## **SECTION 3: Composition/information on ingredients**

## 3.1 Substances

Formula : CLi2O3

Molecular weight : 73,89 g/mol

CAS-No. : 554-13-2

EC-No. : 209-062-5

Registration number : 01-2119516034-53-XXXX

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Lithium carbonate

CAS-No. 554-13-2 Acute Tox. 4; Eye Irrit. 2; <= 100 %

EC-No. 209-062-5 H302, H319

Registration number 01-2119516034-53-XXXX

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## 4.3 Indication of any immediate medical attention and special treatment

needed No data available

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# 5.2 Special hazards arising from the substance or

mixture Carbon oxides, Lithium oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### Components with workplace control parameters

# **Derived No Effect Level (DNEL)**

Application Area	Exposure routes	Health effect	Value
Workers	Skin contact	Acute systemic effects	100mg/kg BW/d
Workers	Inhalation	Acute systemic effects	7,02 mg/m3
Workers	Skin contact	Long-term systemic effects	26,61mg/kg BW/d
Workers	Inhalation	Long-term systemic effects	2,34 mg/m3
Consumers	Skin contact	Acute systemic effects	50mg/kg BW/d
Consumers	Inhalation	Acute systemic effects	3,03 mg/m3

## **Predicted No Effect Concentration (PNEC)**

Compartment	Value
Soil	0,8381 mg/l
Marine water	0,11 mg/l
Fresh water	1,05 mg/l
Marine sediment	0,41 mg/kg
Fresh water sediment	4,09 mg/kg
Sewage treatment plant	122,2 mg/l

# 8.2 Exposure controls

# Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

## Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK -P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

#### **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: white

b) Odour odourless

c) Odour Threshold No data available
d) pH 9,0 - 11,0 at 1 g/l

e) Melting point/freezing Melting point/range: 618 °C - lit.

point

f) Initial boiling point and No data available

boiling range

g) Flash point No data available

h) Evaporation rate No data availablei) Flammability (solid, gas) No data available

j) Upper/lower No data available

flammability or explosive limits

k) Vapour pressureNo data availableNo data available

m) Relative density 2,11 g/cm3

n) Water solubility 8,4 g/l at 20 °C - OECD Test Guideline 105

o) Partition coefficient: n- No data available

octanol/water

p) Auto-ignition No data available

temperature

q) Decomposition No data available

temperature

r) Viscosity No data availables) Explosive properties No data available

## t) Oxidizing properties

No data available

## 9.2 Other safety information

No data available

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Incompatible with strong acids and oxidizing agents.

#### 10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## **Acute toxicity**

LD50 Oral - Rat - 525 mg/kg

LC50 Inhalation - Rat - 4 h - > 2,17 mg/l

#### Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

Eyes - Rabbit Result: Eye irritation

#### Respiratory or skin sensitisation

Buehler Test - Guinea pig

Did not cause sensitisation on laboratory animals.

(OECD Test Guideline 406)

## Germ cell mutagenicity

Animal testing did not show any mutagenic effects.

Result: Not mutagenic in Ames Test

Read-across (Analogy)

## Carcinogenicity

No data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## Reproductive toxicity

Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments. Lithium and its compounds are possible teratogens by analogy to lithium carbonate which has equivocal human teratogenic data and positive animal teratogenic data.

Effects on or via lactation

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

# Specific target organ toxicity - single exposure

No data available

## Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: OJ5800000

Nausea, Anorexia., Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor, clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion., Vomiting, Cyanosis and t-wave inversion have occurred in the breast-fed infants of women receiving lithium carbonate therapy.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 30,3 mg/l - 96 h

Toxicity to daphnia and

d EC50 - Daphnia magna (Water flea) - 33,2 mg/l - 48 h

other aquatic invertebrates

Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) - > 400 mg/l - 72 h

## 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

# 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

## **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

## 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

#### **SECTION 16: Other information**

## Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.H319 Causes serious eye irritation.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.