

Lithium Carbonate
CAS No 554-13-2

MATERIAL SAFETY DATA SHEET SDS/MSDS

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

	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	3 Details of the supplier of the safety data sheet		
	Company	Pallav Chemicals & Solvents Pvt. Ltd	

Company	253, Shiv Shakti Industrial Estate, Opp Mittal Estate Andheri Kurla Road, Andheri (E), Mumbai - 400050
Telephone Email	INDIA : +91 22 4928 4000 : sales@pallavchemicals.com

1.4 Emergency telephone number

Emergency Phone # : +91 22 4928 4000 (9:00am - 6:00 pm) [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



Signal word

Hazard statement(s) H302 H319

Harmful if swallowed. 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

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	Health effect	Value	
	routes			
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	
Developed No. Effect Concentration (DNEC)				

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	F (1) ¹¹
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 point	Melting point/range: 618 °C - lit.
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
I) Vapour density	No 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- octanol/water 	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) 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: 0J5800000

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 other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 33,2 mg/l - 48 h
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 ADR/RID: IMDG: 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 pro No data av	ecautions for user railable		

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.

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. Pallav Chemicals & Solvents Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.pallavchemicals.com for additional terms and conditions of sale.