

SECTION 1: Identification**1.1. Identification**

Product form : Substance
Name : Lithium Carbonate
Product code : 402-04;446-01;449-02;449-12;449-22;584-01;584-02;70005082;70005097

1.2. Recommended use and restrictions on use

Recommended use : Active ingredient in pharmaceutical preparations, Additives
Restrictions on use : In household use

1.3. Supplier

Livent USA Corp
2801 Yorkmont Road, Suite 300
Charlotte, NC 28208
T +1.704.426.5300

Livent Lithium UK Ltd.
Commercial Road
Merseyside, Bromborough, CH62 3NL
England

Livent Lithium (Zhangjiagang) Co., Ltd.
32 Beijing North Road,
Yangtse River Intl. Chemical Park, Zhangjiagang Free Trade Zone, Jiang Su Province, China; Postcode :215635
T: +86.512.5832.7307
Fax: +86.512.5832.7311

Livent Foreign HoldCo B.V.
Basisweg 10
1043 AP Amsterdam Netherlands
Phone: +31 20 521 4681

www.livent.com
sds.info@livent.com

1.4. Emergency telephone number

Emergency number : (CHEMTREC Global) 800-424-9300 | (AR) +54 11 5983-9431 | (UK) +44 20 3807 3798 |
(Korea) 080 822 1374 | (Japan) +81 3-4520-9637 | (China) 400 120 4937 | (China Local)
+86.512.5672.5113 | (China NRCC) 0532-8388-9090 | (US Local) 704-629-5361

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS US classification**

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Full text of H-statements: see section 16		

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: H302 - Harmful if swallowed.

H319 - Causes serious eye irritation.

Precautionary statements (GHS US)

: P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330 - Rinse mouth.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

100% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

100% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Lithium Carbonate

Name	Product identifier	%	GHS US classification
Lithium carbonate	CAS-No.: 554-13-2	100	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general

: Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact

: Wash skin with plenty of water. Take off contaminated clothing.

First-aid measures after eye contact

: 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.

First-aid measures after ingestion

: Rinse mouth. Call a poison center or a doctor if you feel unwell.

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, or water spray or regular foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lithium Carbonate
No additional information available
Lithium carbonate (554-13-2)
No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Chemical goggles or safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Granular powder.
Colour : white
Odour : odourless
Odour threshold : None
pH : 11.2 Aqueous solution
Melting point : Not applicable
Freezing point : Not applicable
Boiling point : Not applicable
Flash point : Not applicable

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: Not applicable
Relative vapour density at 20°C	: Not applicable
Relative density	: No data available
Density	: 2.1 g/ml
Molecular mass	: 73.89 g/mol
Solubility	: Water: 1.3 g/100cm ³ @ 20°C
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: 1310 °C
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive limits	: Not applicable
Explosive properties	: No data available
Oxidising properties	: Not oxidising.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

React in contact of acids.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Acids.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Lithium Carbonate	
LD50 oral rat	> 525 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	525 mg/kg bodyweight

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Lithium Carbonate	
Additional data	Inhalation:dust,mist
Unknown acute toxicity (GHS US)	100% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
Lithium carbonate (554-13-2)	
LD50 oral rat	525 mg/kg Source: International Uniform Chemical Information Database
LD50 oral	753 mg/kg bodyweight Animal: mouse
ATE US (oral)	525 mg/kg bodyweight
Inhalation	dust,mist
Skin corrosion/irritation	: Not classified pH: 11.2 Aqueous solution

Lithium carbonate (554-13-2)	
pH	11.2
Serious eye damage/irritation	: Causes serious eye irritation. pH: 11.2 Aqueous solution

Lithium carbonate (554-13-2)	
pH	11.2
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: Not applicable
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Lithium Carbonate	
LC50 - Fish [1]	30.3 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	33.2 mg/l Daphnia magna (Water flea)
Lithium carbonate (554-13-2)	
LC50 - Fish [1]	30.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	33.2 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 400 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	< mg/l
ErC50 algae	> 400 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
LOEC (chronic)	2.53 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Lithium carbonate (554-13-2)	
NOEC (chronic)	1.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	17.35 mg/l

12.2. Persistence and degradability

Lithium carbonate (554-13-2)	
Not rapidly degradable	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

Lithium Carbonate	
Bioaccumulative potential	No bioaccumulation.

Lithium carbonate (554-13-2)	
Partition coefficient n-octanol/water (Log Pow)	-6.19
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Lithium carbonate (554-13-2)	
Surface tension	No data available in the literature
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT	TDG	IMDG	IATA
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Lithium Carbonate	
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Lithium carbonate (554-13-2)

Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

Lithium carbonate (554-13-2)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

Lithium Carbonate


Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations

Lithium carbonate (554-13-2)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

 **WARNING:** This product can expose you to Lithium carbonate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 5/15/2023

Data sources : ECHA (European Chemicals Agency).

Full text of H-statements	
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Indication of changes:			
Section	Changed item	Change	Comments
	Supersedes	Added	No additional information available
	Revision date	Added	No additional information available
	ATE US (dust,mist)	Added	No additional information available
	Hazard pictograms (GHS US)	Modified	No additional information available
	Precautionary statements (GHS US)	Modified	No additional information available
	Hazard statements (GHS US)	Modified	No additional information available
	Issue date	Modified	No additional information available
1	Name	Added	No additional information available
1	Product code	Added	No additional information available
1	Recommended use	Added	No additional information available
1	Restrictions on use	Added	No additional information available
1	Trade name	Added	No additional information available
2.1	GHS-US classification	Modified	No additional information available
4	Symptoms/effects after eye contact	Modified	No additional information available
4	First-aid measures after inhalation	Modified	No additional information available
4	First-aid measures after skin contact	Modified	No additional information available
4	First-aid measures general	Modified	No additional information available
4	Symptoms/effects after inhalation	Removed	No additional information available
6	Emergency procedures	Modified	No additional information available
7.1	Hygiene measures	Modified	No additional information available

Lithium Carbonate

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.1	Precautions for safe handling	Modified	No additional information available
9	Viscosity, kinematic	Removed	No additional information available
9	Freezing point	Removed	No additional information available
9	Flash point	Removed	No additional information available
9	Explosive limits (vol %)	Removed	No additional information available
9	Auto-ignition temperature	Removed	No additional information available
9	pH	Added	No additional information available
9	Oxidising properties	Added	No additional information available
9	Partition coefficient n-octanol/water (Log Pow)	Added	No additional information available
9	Relative vapour density at 20°C	Added	No additional information available
9	Density	Added	No additional information available
9	Vapour pressure	Added	No additional information available
9	Odour threshold [ppm]	Added	No additional information available
9	Odour	Added	No additional information available
9	Molecular mass	Added	No additional information available
9	Melting point	Added	No additional information available
9	Decomposition temperature	Added	No additional information available
9	Boiling point	Added	No additional information available
9	Colour	Added	No additional information available
9	Appearance	Added	No additional information available
11	LD50 oral rat	Added	No additional information available
11	LD50 dermal rat	Added	No additional information available
11	LC50 Inhalation - Rat	Added	No additional information available
12.1	EC50 - Crustacea [1]	Added	No additional information available
12.1	LC50 - Fish [1]	Added	No additional information available
12.1	EC50 - Other aquatic organisms [1]	Added	No additional information available
12.3	Partition coefficient n-octanol/water (Log Pow)	Added	No additional information available

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.