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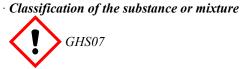
CHEMICALS. INC

Reviewed on 02/09/2022

1 Identification

- · Product name
- · Trade name: Lithium carbonate (99.999%-Li) PURATREM
- Item number: 03-0800
- · CAS Number:
- 554-13-2
- *EC number:* 209-062-5
- Details of the supplier of the safety data sheet • Manufacturer/Supplier:
- Strem Chemicals, Inc. 7 Mulliken Way NEWBURYPORT, MA 01950 USA info@strem.com
- · Information department: Technical Department
- Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600

2 Hazard(s) identification



Acute Tox. 4H302Harmful if swallowed.Acute Tox. 4H332Harmful if inhaled.Eye Irrit. 2AH319Causes serious eye irritation.

- · Label elements
- GHS label elements
- The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Warning

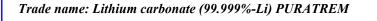
· Hazard-determini	ng components of labeling:
lithium carbonate	
• Hazard statements	S
H302+H332 Harn	ıful if swallowed or if inhaled.
H319 Caus	es serious eye irritation.
· Precautionary stat	tements
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	8 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

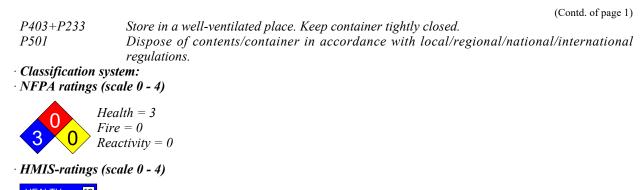
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· Other hazards

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 554-13-2 lithium carbonate
- · Identification number(s)
- EC number: 209-062-5

4 First-aid measures

- · Description of first aid measures
- General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Immediately call a doctor.
- Information for doctor:

• Most important symptoms and effects, both acute and delayed No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

• Suitable extinguishing agents: Use fire fighting measures that suit the environment.

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3.1 mg/m3

34 mg/m3

210 mg/m3

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• Special hazards arising from the substance or mixture No further relevant information available.

• Advice for firefighters

· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Not required.

- Environmental precautions: No special measures required.
- *Methods and material for containment and cleaning up:* Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals

• PAC-1:

· PAC-2:

· PAC-3:

7 Handling and storage

- · Handling:
- · Precautions for safe handling
- Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Keep receptacle tightly sealed.
- *Specific end use(s) No further relevant information available.*

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

- Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

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Trade name: Lithium carbonate (99.999%-Li) PURATREM

Wash hands before breaks and Avoid contact with the eyes. Avoid contact with the eyes and Breathing equipment: A NIOS. Protection of hands:	
Protective gloves	
Due to missing tests no recomm chemical mixture. Selection of the glove material • Material of gloves The selection of the suitable glov varies from manufacturer to mate • Penetration time of glove mate	rial has to be found out by the manufacturer of the protective gloves and has to be
9 Physical and chemical pr	operties
• Information on basic physical • General Information • Appearance:	
Form: Color:	Powder White
· Odor:	Odorless
• Odor threshold:	Not determined.

· Odor:	Odorless	
· Odor threshold:	Not determined.	
· pH-value:	Not applicable.	
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	723 °C (1333 °F) 1.310 °C (34 °F)	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not determined.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
• Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits: Lower:	Not determined.	
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	((Contd. of page 4)
Upper:	Not determined.	
· Vapor pressure:	Not applicable.	
· Density at 20 °C (68 °F):	2.11 g/cm³ (17.60795 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with Water:	Insoluble.	
· Partition coefficient (n-octanol/wa	iter): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	0.0~%	
VOC content:	0.0 g/l / 0.00 lb/gl	
Solids content:	100.0 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.

• Conditions to avoid No further relevant information available.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

- Acute toxicity:
- · LD/LC50 values that are relevant for classification:

554-13-2 lithium carbonate

Oral LD50 525 mg/kg (rat)

· Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: Irritating effect.

• Sensitization: No sensitizing effects known.

• Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

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• OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- *Aquatic toxicity:* No further relevant information available.
- *Persistence and degradability* No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

- *Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- · Uncleaned packagings:
- *Recommendation: Disposal must be made according to official regulations.*

UN-Number DOT, ADN, IMDG, IATA	not regulated	
	noi regululeu	
UN proper shipping name DOT, ADN, IMDG, IATA	not regulated	
Transport hazard class(es)		
DOT, ADN, IMDG, IATA		
Class	not regulated	
Packing group		
DOT, IMDG, IATA	not regulated	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Anne	ex II of	
MARPOL73/78 and the IBC Code	Not applicable.	

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15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

• Section 355 (extremely hazardous substances):

Substance is not listed.

• Section 313 (Specific toxic chemical listings):

Substance is listed.

• TSCA (Toxic Substances Control Act):

Substance is listed.

· Proposition 65 WARNING. Proposition 65 - https://www.p65warnings.ca.gov/

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

• Chemicals known to cause developmental toxicity:

Substance is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

• TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Warning

· Hazard-detern	nining components of labeling:
lithium carbon	ate
• Hazard statem	ents
H302+H332 H	Iarmful if swallowed or if inhaled.
H319 C	Causes serious eye irritation.
· Precautionary	statements
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+1	P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/internation regulations.
· Chemical safety	<i>y assessment:</i> A Chemical Safety Assessment has not been carried out.
6 Other inform	nation
	on is based on our present knowledge. However, this shall not constitute a guarantee for a t features and shall not establish a legally valid contractual relationship.
· Department iss	uing SDS: Technical Department.
· Contact: Techn	
· Date of prepara	ution / last revision 02/15/2022 / -
· Abbreviations a	
	péen sur le transport des marchandises dangereuses par Route (European Agreement concerning the Internation
	ous Goods by Road)
IMDG: Internationa	al Maritime Code for Dangerous Goods
IMDG: Internationa DOT: US Departme	al Maritime Code for Dangerous Goods ent of Transportation
IMDG: Internationa DOT: US Departme IATA: International	al Maritime Code for Dangerous Goods ent of Transportation I Air Transport Association
IMDG: Internationa DOT: US Departme IATA: International ACGIH: American	al Maritime Code for Dangerous Goods ent of Transportation l Air Transport Association Conference of Governmental Industrial Hygienists
IMDG: Internationa DOT: US Departme IATA: International ACGIH: American EINECS: European	al Maritime Code for Dangerous Goods ent of Transportation I Air Transport Association Conference of Governmental Industrial Hygienists Inventory of Existing Commercial Chemical Substances
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IMDG: Internationa DOT: US Departme IATA: International ACGIH: American EINECS: European CAS: Chemical Abs NFPA: National Fin HMIS: Hazardous M VOC: Volatile Orga LC50: Lethal dose, PBT: Persistent, Bic vPvB: very Persisten, NIOSH: National In	al Maritime Code for Dangerous Goods ent of Transportation l'Air Transport Association Conference of Governmental Industrial Hygienists Inventory of Existing Commercial Chemical Substances tracts Service (division of the American Chemical Society) re Protection Association (USA) Materials Identification System (USA) unic Compounds (USA, EU) intration, 50 percent 50 percent paccumulative and Toxic nt and very Bioaccumulative istitute for Occupational Safety
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IMDG: International DOT: US Departme IATA: International ACGIH: American O EINECS: European CAS: Chemical Abs NFPA: National Fin HMIS: Hazardous M VOC: Volatile Orga LC50: Lethal conce LD50: Lethal dose, PBT: Persistent, Bid vPvB: very Persiste, NIOSH: National In OSHA: Occupationa TLV: Threshold Lin PEL: Permissible E REL: Recommended	al Maritime Code for Dangerous Goods ent of Transportation Mir Transport Association Conference of Governmental Industrial Hygienists Inventory of Existing Commercial Chemical Substances tracts Service (division of the American Chemical Society) re Protection Association (USA) Materials Identification System (USA) unic Compounds (USA, EU) entration, 50 percent 50 percent 50 percent 50 percent soaccumulative and Toxic ent and very Bioaccumulative istitute for Occupational Safety al Safety & Health nit Value Exposure Limit