

[Lithium  
Trifluoro\(trifluoromethyl\)borate -  
Dimethyl Carbonate Complex](#)

[Pricing >](#)

Linear Formula	C <sub>4</sub> H <sub>6</sub> BF <sub>6</sub> LiO <sub>3</sub>
Pubchem CID	56973698
MDL Number	N/A
EC No.	N/A
IUPAC Name	lithium dimethyl carbonate trifluoro(trifluoromethyl)boranuide
SMILES	[Li+].[B-](C(F)(F)F)(F)(F)F.COC(=O)OC
Inchl Identifier	InChI=1S/C3H6O3.CBF6.Li/c1-5-3(4)6-2;3-1(4,5)2(6,7)8;/h1-2H3;;/q;-1;+1
Inchl Key	ZGAWBZORCLPFJC-UHFFFAOYSA-N
Signal Word	Warning
Hazard Statements	H315-H319
Hazard Codes	N/A
Risk Codes	N/A
Safety Statements	N/A
Transport Information	N/A

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## SAFETY DATA SHEET

Date Accessed: 04/28/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #1443685-69-5

**Relevant identified uses of the substance:**  
Scientific research and development

Supplier details:  
American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:  
Domestic, North America +1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Skin

Corrosion/Irritation [Category 2]

Eye Damage/Irritation [Category 2A]

Signal word: Warning!

Hazard Statement(s): Causes serious eye irritation

Causes skin irritation



Pictogram(s) or Symbol(s):

Precautionary Statement(s):

[Prevention] Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye and face protection.

[Response] If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: 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 or attention.

[Storage] None

[Disposal] None

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance

Components: Lithium Trifluoro(trifluoromethyl)borate - Dimethyl Carbonate Complex

Percent: >98.0%(T)

CAS Number: 1443685-69-5

Molecular Weight: 233.83

Chemical Formula: C<sub>4</sub>H<sub>6</sub>BF<sub>6</sub>LiO<sub>3</sub>

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## SECTION 4. FIRST AID MEASURES

Inhalation: Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim

is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that

medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin contact: If skin irritation occurs get medical advice/attention. Remove and wash contaminated clothing before reuse.

In case of contact with substance, immediately flush skin with running water for at least 20 minutes.

Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Eye contact: IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open.

Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Ingestion: Do not induce vomiting without medical advice. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Symptoms/effects:

Acute: Redness.

Delayed: No data available

Immediate medical attention: If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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## **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media: Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam Consult with local fire authorities before

attempting large scale fire fighting operations.  
Specific hazards arising from the chemical  
Hazardous combustion products: These products  
include: Carbon oxides Halogenated compounds  
Borates Metallic oxides  
Other specific hazards: WARNING: Highly toxic HF  
gas is produced during combustion.  
Special precautions for fire-fighters:  
Use water spray or fog; do not use straight streams.  
Dike fire-control water for later disposal; do not scatter  
the material. Containers may explode when  
heated. Move containers from fire area if you can do it  
without risk.  
Special protective equipment for fire-fighters:  
Wear positive pressure self-contained breathing  
apparatus (SCBA). Structural fire fighters' protective  
clothing provides limited protection in fire situations  
ONLY; it may not be effective in spill situations. Wear  
chemical protective clothing which is specifically  
recommended by the manufacturer. It may  
provide little or no thermal protection.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions: Avoid contact with skin, eyes,  
and clothing. Keep people away from and upwind of  
spill/leak. Do not touch  
damaged containers or spilled material unless  
wearing appropriate protective clothing (Section 8).  
Warn  
unnecessary personnel to move away. Stop leak if  
you can do it without risk. Ensure adequate  
ventilation.  
Isolate the hazard area and deny entry to  
unnecessary and unprotected personnel.  
Personal protective equipment: Wear eye protection  
(splash goggles) and face protection (full length face  
shield). Lab coat. Dust  
respirator. Be sure to use a MSHA/NIOSH approved  
respirator or equivalent. Wear protective gloves  
(nitrile).  
Emergency procedures: Prevent dust cloud. In case  
of a spill and/or a leak, always shut off any sources of  
ignition, ventilate the  
area, and exercise caution. Do not touch damaged  
containers or spilled material unless wearing  
appropriate protective clothing. Warn personnel to  
move away. Prevent entry into sewers, basements or  
confined areas; dike if needed.  
Methods and materials for containment and cleaning  
up:  
ELIMINATE all ignition sources (no smoking, flares,

sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.

Environmental precautions:

Prevent further leakage or spillage if safe to do so.

Water runoff can cause environmental damage.

Prevent entry into sewers, basements or confined areas; dike if needed.

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## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling: Avoid inhalation of vapor or mist. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke.

Keep away from sources of ignition.

Conditions for safe storage: Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles.

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store under inert gas (e.g. Argon). Hygroscopic material, store in a tightly sealed container. Store in a freezer.

Storage incompatibilities: Store away from oxidizing agents

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure limits: No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection: Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hand protection: Nitrile gloves.

Eye protection: Safety glasses.

Skin and body protection: Lab coat.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state (20°C): Solid  
Form: Crystal - Powder  
Color: White - Almost white  
Odor: No data available  
Odor threshold: No data available

Melting point/freezing point: No data available  
Boiling point/range: No data available  
Decomposition temperature: No data available  
Relative density: No data available  
Kinematic Viscosity: No data available  
Partition coefficient: No data available  
n-octanol/water (log Pow)  
Flash point: No data available  
Flammability (solid, gas): No data available

pH: No data available  
Vapor pressure: No data available  
Vapor density: No data available  
Dynamic Viscosity: No data available  
Evaporation rate: No data available  
(Butyl Acetate = 1)  
Autoignition temperature: No data available  
Flammability or explosive limits: No data available  
Lower: No data available  
Upper: No data available

Solubility(ies):  
Water: Soluble

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## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity: Not Available.  
Chemical Stability: Heat sensitive.  
Possibility of Hazardous Reactions: No hazardous reactivity has been reported.  
Conditions to avoid: Heat sensitive.  
Incompatible materials: Oxidizing agents  
Hazardous Decomposition Products: No data available

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute Toxicity:

No data available  
Skin corrosion/irritation:  
No data available  
Serious eye damage/irritation:  
No data available  
Respiratory or skin sensitization:  
No data available  
Germ cell mutagenicity:  
No data available  
Carcinogenicity:  
No data available  
IARC: No data available NTP: No data available  
OSHA: No data available  
Reproductive toxicity:  
No data available  
Routes of Exposure: Inhalation, Eye contact,  
Ingestion, Skin contact.  
Symptoms related to exposure:  
Skin contact may result in inflammation; characterized  
by itching, scaling, reddening, or occasionally  
blistering. Skin contact may result in redness, pain  
or dry skin. Eye contact may result in redness or pain.  
Potential Health Effects:  
Skin and eye contact may result in irritation.  
Target organ(s): No data available

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## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity  
Fish: No data available  
Crustacea: No data available  
Algae: No data available  
Persistence and degradability: No data available  
Bioaccumulative potential (BCF): No data available  
Mobility in soil: No data available  
Partition coefficient:  
n-octanol/water (log Pow)  
No data available  
Soil adsorption (Koc): No data available  
Henry's Law:  
constant (PaM<sup>3</sup>/mol)  
No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal of product: Recycle to process if possible. It  
is the generator's responsibility to comply with  
Federal, State and Local  
rules and regulations. You may be able to dissolve or  
mix material with a combustible solvent and burn in a

chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.  
Disposal of container: Dispose of as unused product.  
Do not re-use empty containers.  
Other considerations: Observe all federal, state and local regulations when disposing of the substance.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT (US) Non-hazardous for transportation.  
IATA Non-hazardous for transportation.  
IMDG Non-hazardous for transportation.

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## **SECTION 15. REGULATORY INFORMATION**

Toxic Substance Control Act (TSCA 8b.):  
This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:  
(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.  
(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.  
US Federal Regulations  
CERCLA Hazardous substance and Reportable Quantity:  
SARA 313: Not Listed  
SARA 302: Not Listed  
State Regulations  
State Right-to-Know  
Massachusetts Not Listed  
New Jersey Not Listed  
Pennsylvania Not Listed  
California Proposition 65: Not Listed  
Other Information  
NFPA Rating:  
Health: 2



Flammability: 0  
Instability: 0  
HMIS Classification:  
Health: 2  
Flammability: 0  
Physical: 0  
International Inventories  
WHMIS hazard class: D2B: Materials causing other  
toxic effects. (Toxic)

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## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

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