Heegermaterials

SAFETY DATA SHEET

Revision Date 29-Mar-2024

Revision Number 4

| 1. Identification | | | | | | |
|--|--|--|--|--|--|--|
| Product Name | Lithium Tert-Butoxide | | | | | |
| Cat No. : | 46366 | | | | | |
| CAS No Synonyms | 1907-33-1 No information available | | | | | |
| Recommended Use Uses advised against | Laboratory chemicals. Food, drug, pesticide or biocidal product use. | | | | | |
| For information US call: 001-80 Emergency Number US: 001-20 | ner 00-227-6701 / Europe call: +32 14 57 52 11 01-796-7100 / Europe: +32 14 57 52 99 800-424-9300 / Europe:001-703-527-3887 | | | | | |
| | 2. Hazard(s) identification | | | | | |
| Classification This chemical is considered ha | zardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) | | | | | |
| Flammable solids | Category 2 | | | | | |

Flammable solids Acute oral toxicity Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 2 Category 4 Category 1 B Category 1

Label Elements

Signal Word Danger

Hazard Statements

Flammable solid Harmful if swallowed Causes severe skin burns and eye damage



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Eves

Eyes IF IN EYES: Rinse cautious, Ingestion Rinse mouth Do NOT induce vomiting Fire In case of fire: Use CO2, dry chemical, or foam for extinction Storage 'noked up on approved waste disposal plant IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

3. Composition/Information on Ingredients

| Component | CAS No | Weight % | | |
|-------------------------------------|-----------|----------|--|--|
| 2-Propanol, 2-methyl-, lithium salt | 1907-33-1 | >95 | | |

4. First-aid measures

| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
|--------------|---|
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. |
| Inhalation | Remove to fresh air. Get medical attention immediately if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |

| Most important symptoms and effects | None reasonably foreseeable. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation | | | | | | |
|--|--|--|--|--|--|--|--|
| Notes to Physician | Treat symptomatically | | | | | | |
| | 5. Fire-fighting measures | | | | | | |
| | | | | | | | |
| Suitable Extinguishing Media | Dry chemical, soda ash, lime or sand. approved class D extinguishers. | | | | | | |
| Unsuitable Extinguishing Media | No information available | | | | | | |
| Flash Point Method - | No information available No information available | | | | | | |
| Autoignition Temperature Explosion Limits | Not applicable | | | | | | |
| Upper | No data available | | | | | | |
| Lower | No data available | | | | | | |
| Sensitivity to Mechanical Impact Sensitivity to Static Discharge | No information available | | | | | | |
| Specific Hazards Arising from the C Flammable. Water reactive. Combustib | hemical ole material. Produce flammable gases on contact with water. | | | | | | |
| Hazardous Combustion Products Carbon monoxide (CO). Carbon dioxid Protective Equipment and Precaution As in any fire, wear self-contained breat protective gear. | ons for Firefighters athing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full | | | | | | |
| NFPA | | | | | | | |
| Health 0 | Flammability Instability Physical hazards W | | | | | | |
| | | | | | | | |
| Personal Precautions | 6. Accidental release measures Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust | | | | | | |
| | formation. | | | | | | |
| Environmental Precautions | Should not be released into the environment. | | | | | | |
| Methods for Containment and Clear Up | Sweep up and shovel into suitable containers for disposal. Avoid dust formation. | | | | | | |
| | 7. Handling and storage | | | | | | |
| Handling | Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation. | | | | | | |
| Storage. | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Corrosives area. Flammables area. Keep under nitrogen. Keep away from water or moist air. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Acids. Water. Oxidizing agent. | | | | | | |
| 8. Ex | posure controls / personal protection | | | | | | |
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. | | | | | | |

| Engineering Measures | None under normal use conditions. | | | | |
|-------------------------------|---|--|--|--|--|
| Personal Protective Equipment | | | | | |
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. | | | | |
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. | | | | |
| Respiratory Protection | No protective equipment is needed under normal use conditions. | | | | |
| Recommended Filter type: | Particle filter. | | | | |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. | | | | |

9. Physical and chemical properties

| Physical State | Powder Solid |
|--|------------------|
| Appearance | Off-white |
| Odor | No information |
| Odor Threshold | No information |
| pH 🔨 🚫 | 7 |
| Melting Point/Range | No data availa |
| Boiling Point/Range | No information |
| Flash Point | No information |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information |
| Flammability or explosive limits | |
| Upper | 🚽 No data availa |
| Lower | No data availa |
| Vapor Pressure | No information |
| Vapor Density | Not applicable |
| Specific Gravity | 0.890 🔍 🔍 |
| Solubility | No information |
| Partition coefficient; n-octanol/water | No data availa |
| Autoignition Temperature | Not applicable |
| Decomposition Temperature | No information |
| Viscosity | Not applicable |
| Molecular Formula | C4 H9 Li O |
| Molecular Weight | 80.06 |
| - | |

Off-white No information available No information available 7 No data available No information available No information available Not applicable No information available Vo data available No data available No information available Not applicable 0.890 Inc. No information available No data available Not applicable No information available Not applicable C4 H9 Li O

| 10. Stability and reactivity | | | | |
|---|--|--|--|--|
| Reactive Hazard | Yes | | | |
| Stability | Reacts violently with water. Hygroscopic. Moisture sensitive. | | | |
| Conditions to Avoid | Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Exposure to moist air or water. | | | |
| Incompatible Materials | Acids, Water, Oxidizing agent | | | |
| Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2) | | | | |
| Hazardous Polymerization | No information available. | | | |
| Hazardous Reactions | None under normal processing. | | | |

11. Toxicological information

Acute Toxicity

| Product Information Component Information Toxicologically Synergistic Products Delayed and immediate effects as w | No information ava | | d long-term expo | sure_ | | | | |
|---|--|--|------------------|------------|------------|--|--|--|
| Irritation | No information available | | | | | | | |
| Sensitization | No information ava | ilable | | | | | | |
| Carcinogenicity | The table below inc | The table below indicates whether each agency has listed any ingredient as a carcinogen. | | | | | | |
| Component CAS No | IARC | NTP | ACGIH | OSHA | Mexico | | | |
| 2-Propanol, 2-methyl-, 1907-33-1 lithium salt | Not listed | Not listed | Not listed | Not listed | Not listed | | | |
| Mutagenic Effects | No information ava | ilable | | | | | | |
| Reproductive Effects | No information ava | ilable. | | | | | | |
| Developmental Effects | No information ava | ilable. | | | | | | |
| Teratogenicity | No information ava | ilable. | | | | | | |
| STOT - single exposure STOT - repeated exposure | None known None known | | | | | | | |
| Aspiration hazard | No information available | | | | | | | |
| Symptoms / effects,both acute and delayed | Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation | | | | | | | |
| Endocrine Disruptor Information | No information available | | | | | | | |
| Other Adverse Effects | The toxicological properties have not been fully investigated. | | | | | | | |
| | 12. Ecolo | gical inforr | nation | • | | | | |
| <u>Ecotoxicity</u> Do not empty into drains | | | | | | | | |
| Persistence and Degradability | Soluble in water Persistence is unlikely based on information available. | | | | | | | |
| Bioaccumulation/ Accumulation | No information available. | | | | | | | |
| Mobility | Will likely be mobile in the environment due to its water solubility. | | | | | | | |
| | 13. Dispo | sal conside | rations | | | | | |
| Waste Disposal Methods | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. | | | | | | | |
| | 14. Tran | sport inforn | nation | | | | | |
| <u>DOT</u> UN-No | UN2925 | | | | | | | |

| Proper Shipping Name Technical Name Hazard Class Subsidiary Hazard Class Packing Group TDG | Flammable solid, corrosive, organic, n.o.s. 2-Propanol, 2-methyl-, lithium salt 4.1 8 II |
|---|--|
| UN-No | UN2925 |
| Proper Shipping Name | FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. |
| Hazard Class | 4.1 |
| Subsidiary Hazard Class | 8 |
| Packing Group | II |
| | |
| UN-No | UN2925 |
| Proper Shipping Name | Flammable solid, corrosive, organic, n.o.s. |
| Hazard Class | 4.1 |
| Subsidiary Hazard Class | 8 |
| Packing Group | II |
| IMDG/IMO | |
| UN-No | UN2925 |
| Proper Shipping Name | Flammable solid, corrosive, organic, n.o.s. |
| Hazard Class | 4.1 |
| Subsidiary Hazard Class | 8 |
| Packing Group | II |
| | |

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|-------------------------|-------------------|--|--------------------------------|
| 2-Propanol, 2-methyl-, lithium salt | 1907-33-1 | Х | ACTIVE | - |
| Legend: TSCA US EPA (TSCA) - Toxic Sub X - Listed '-' - Not Listed | ostances Control Act, (| (40 CFR Part 710) | rial | |
| TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) | | | applicable | _ |
| TSCA 12(b) - Notices of Export | | Not | applicable | |

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-------------------------------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| 2-Propanol, 2-methyl-, lithium salt | 1907-33-1 | - | Х | 217-611-5 | Х | Х | Х | - | - | KE-22579 |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

| CWA (Clean Water Act) | Not applicable |
|---|----------------|
| Clean Air Act | Not applicable |
| OSHA - Occupational Safety and Health Administration | Not applicable |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

| California Proposition 65 | This product does | This product does not contain any Proposition 65 chemicals. | | | | | |
|--|--------------------|---|--|---|--|--|--|
| U.S. State Right-to-Know Regulations | Not applicable | | | | | | |
| U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant U.S. Department of Homeland | N N N | not contain any DHS ch | emicals. | | | | |
| Other International Regulations | SCri | | | | | | |
| Mexico - Grade | No information ava | ailable | | | | | |
| Authorisation/Restrictions according to EU REACH Not applicable | | | | | | | |
| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) | | | |
| 2-Propanol, 2-methyl-, lithium salt | 1907-33-1 | - | - | - | | | |

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

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-------------------------------------|-----------|----------------|---------------------------------|------------------------------|--|
| 2-Propanol, 2-methyl-, lithium salt | 1907-33-1 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - | Seveso III Directive (2012/18/EC) - | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------|--------|--|--|-------------------------------|---------------------------------------|
|-----------|--------|--|--|-------------------------------|---------------------------------------|

Lithium tert-butoxide

| Ha | | Qualifying Quantities for Major Accident Notification | Qualifying Quantities for Safety Report Requirements | | | | |
|-------------------------------------|-----------|---|--|----------------|----------------|--|--|
| 2-Propanol, 2-methyl-, lithium salt | 1907-33-1 | Not applicable | Not applicable | Not applicable | Not applicable | | |
| SCr | | | | | | | |
| | | 16. Other info | ormation | | | | |
| Revision Date | 29-Mar- | 9-Mar-2024 | | | | | |
| Print Date | 29-Mar- | 29-Mar-2024 | | | | | |
| Revision Summary | New em | New emergency telephone response service provider. | | | | | |
| Disclaimer | | | ~1a/o | * | | | |

Disclaimei

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS