

Lithium tetraborate

222534-250G

Version 2.0

Issuing date 12/18/2016

Revision Date 09/11/2023

Print Date 09/12/2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Lithium tetraborate

Number : 000000002983

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH
Wunstorfer Straße 40
Seelze, 30926
Germany

For further information, please contact: : 1-800-368-0050
+1-231-726-3171
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**
In Japan: **+(81)-345209637**

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Classification of the substance or mixture : **Acute toxicity, Category 4, Oral**
Serious eye damage, Category 1
Reproductive toxicity, Category 2

GHS Label elements, including precautionary statements

Symbol(s) :



Signal word : Danger

Hazard statements : Harmful if swallowed.

Lithium tetraborate

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Causes serious eye damage.
Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/ doctor.

Storage:
Store locked up.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTSFormula : $\text{Li}_2\text{B}_4\text{O}_7$

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Lithium tetraborate	12007-60-2	<=100.00 %
Lithium tetraborate		

Note: none

4. FIRST AID MEASURES

General advice : First aider needs to protect himself.

SAFETY DATA SHEET



Lithium tetraborate

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	Move out of dangerous area. Immediately take off contaminated clothing and rinse body with plenty of water.
Inhalation	: When inhaled remove to fresh air and seek medical aid. If symptoms persist, call a physician.
Skin contact	: After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.
Eye contact	: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Protect unharmed eye. If eye irritation persists, consult a specialist.
Ingestion	: A person suspected to have swallowed the substance who is conscious should be given water to drink. Take to a doctor immediately together with this card Call a physician immediately.
Notes to physician	: Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Foam Carbon dioxide (CO2) Dry powder
Specific hazards during firefighting	: Fire may cause evolution of: Metal oxides Boron oxides
Special protective equipment for firefighters	: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.
Further information	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and	: Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons
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SAFETY DATA SHEET



Lithium tetraborate

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emergency procedures	must be kept away. Ensure adequate ventilation. Avoid dust formation.
Environmental precautions	: Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	: Use mechanical handling equipment. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

Precautions for safe handling	: Wear personal protective equipment. Use only in well-ventilated areas. Avoid dust formation. Avoid inhalation, ingestion and contact with skin and eyes.
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Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
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Storage

Conditions for safe storage, including any incompatibilities	: Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

Use with local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
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Hand protection	: Latex gloves Gloves must be inspected prior to use.
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Lithium tetraborate

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Replace when worn.

Eye protection : Safety glasses with side-shields

Skin and body protection : Protective suit

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid breathing dust or spray mist.
Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Colour : colourless

Odour : odourless

Odour Threshold : Note: No data available

pH : Note: No data available

Melting point/range : 760 - 880 °C

Boiling point/boiling range : Note: No data available

Flash point : Note: Not applicable

Evaporation rate : Note: No data available

Lower explosion limit : Note: No data available

Upper explosion limit : Note: No data available

Vapour pressure : Note: No data available

SAFETY DATA SHEET



Lithium tetraborate

222534-250G

Version 2.0

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Vapour density	: Note: No data available
Density	: 0.25 g/cm ³ at 25 °C
Water solubility	: Note: No data available
Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, dynamic	: Note: No data available
Viscosity, kinematic	: Note: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 169.12 g/mol

10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Protect from moisture.
Incompatible materials to avoid	: Strong oxidizing agents Strong acids
Hazardous decomposition products	: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact, Ingestion

Lithium tetraborate

222534-250G

Version 2.0

Issuing date 12/18/2016

Revision Date 09/11/2023

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Acute oral toxicity	: 500 mg/kg Species: Rat, female Method: OECD 423
Acute inhalation toxicity	: Note: No data available
Acute dermal toxicity	: Note: No data available
Skin corrosion/irritation	: Note: No data available
Serious eye damage/eye irritation	: Species: Rabbit Result: Risk of serious damage to eyes. Method: OECD Test Guideline 405
Respiratory sensitisation	: Note: No data available
Skin sensitisation	: Note: No data available
Germ cell mutagenicity	: Note: No data available
Carcinogenicity	: Note: No data available
Reproductive toxicity	: Species: Rat NOAEL: 50 mg/kg bw/d Method: OECD Test Guideline 422
Specific target organ toxicity - single exposure	: Note :No data available
Specific target organ toxicity - repeated exposure	: Note :No data available
Aspiration toxicity	: No data available
CMR effects Lithium tetraborate	: Reproductive toxicity: Suspected human reproductive toxicant
Further information	: Note: No toxicology information is available.

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12. ECOLOGICAL INFORMATION**Aquatic and ecotoxicity**

Toxicity to fish : Note: No data available

Toxicity to daphnia and other aquatic invertebrates : Note: No data available

Toxicity to algae : Note: No data available

Persistence and degradability

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

Bioaccumulation : Note: No data available

Mobility in soil

Mobility : Note: No data available

Other adverse effects

Additional ecological information : We have no quantitative data concerning the ecological effects of this product.

13. DISPOSAL CONSIDERATIONS

Disposal methods : In accordance with local and national regulations.

14. TRANSPORT INFORMATION

Lithium tetraborate

222534-250G

Version 2.0

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ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID

Not dangerous goods

15. REGULATORY INFORMATION**National regulatory information**

Fire Service Law : Not relevant

Poisonous and Deleterious
Substances Control Law : Not relevantAct on Confirmation, etc. of
Release Amounts of Specific : Class 1
Chemical Substances in the 405
Environment and Promotion Listed
of Improvements to the
Management Thereof Lithium tetraborate 12007-60-2**Other international regulations****Notification status**US. Toxic Substances : On TSCA Inventory
Control ActAustralia. Inventory of : On the inventory, or in compliance with the inventory
Industrial Chemicals (AIIC),
as amendedCanada. Canadian : All components of this product are on the Canadian DSL
Environmental Protection Act
(CEPA). Domestic
Substances List (DSL)

SAFETY DATA SHEET



Lithium tetraborate

222534-250G

Version 2.0

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Japan. Kashin-Hou Law List	: On the inventory, or in compliance with the inventory
Korea. Existing Chemicals Inventory (KECI)	: On the inventory, or in compliance with the inventory
Philippines. Inventory of Chemicals and Chemical Substances (PICCS)	: On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances (IECSC)	: On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	: On the inventory, or in compliance with the inventory
Taiwan Chemical Substance Inventory (TCSI)	: On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2*	2
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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

Lithium tetraborate

222534-250G

Version 2.0

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materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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