

Printing date 07/31/2016 Reviewed on 07/31/2016

## 1 Identification

· Product name

· Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

· *Item number:* 93-0572

• CAS Number: 75965-35-4

· 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

· Classification of the substance or mixture



GHS02 Flame

Flam. Sol. 1 H228 Flammable solid.

- · Label elements
- · GHS label elements

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

· Hazard pictograms



GHS02

- · Signal word Danger
- · Hazard statements

H228 Flammable solid.

· Precautionary statements

P231 Handle under inert gas.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P222 Do not allow contact with air.

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

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 2

Reactivity = 0

(Contd. of page 1)



## Safety Data Sheet according to OSHA HCS

Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

· HMIS-ratings (scale 0 - 4)

 $\begin{array}{cccc} \textbf{HEALTH} & \textbf{0} & Health = 0 \\ \textbf{FIRE} & \textbf{0} & Fire = 0 \\ \textbf{REACTIVITY} & \textbf{0} & Reactivity = 0 \\ \end{array}$ 

- · 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

75965-35-4 Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

#### 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

## 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- Wear protective equipment. Keep unprotected persons away.
- $\cdot \textit{Environmental precautions: No special measures required.}$
- · 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.

(Contd. on page 3)



Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

(Contd. of page 2)

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 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: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

 $\cdot$  *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.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

US



Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

(Contd. of page 3)

	(Contr	d. of pa
Physical and chemical proper	rties	
Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Powder	
Color:	Whitish	
Odor:	undistinguishable	
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	no data °C	
Boiling point/Boiling range:	no data °C	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Flammable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	no data hPa	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble.	
Partition coefficient (n-octanol/wat	ter): 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.

(Contd. on page 5)



Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

(Contd. of page 4)

- · 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:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No 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.

· 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.
- $\cdot \textit{\textbf{Mobility in soil}} \ \textit{No further relevant information available}.$
- · 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.

ric



Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

(Contd. of page 5)

Transport information	
UN-Number DOT, IMDG, IATA	UN1325
UN proper shipping name DOT, IATA IMDG	Flammable solids, organic, n.o.s. FLAMMABLE SOLID, ORGANIC, N.O.S.
Transport hazard class(es) DOT	
ANTERIO	
Class	4.1 Flammable solids, self-reactive substances and soli desensitised explosives
Label IMDG	4.1
Class Label	4 4. I
IATA	
Class	4.1 Flammable solids, self-reactive substances and soli desensitised explosives
Label	4.1
Packing group DOT, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
EMS Number: Stowage Category	F-A,S-G B
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	
DOT Quantity limitations	On passenger aircraft/rail: 15 kg
	On cargo aircraft only: 50 kg



Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

(Contd. of page 6)

· UN "Model Regulation":

UN 1325 FLAMMABLE SOLIDS, ORGANIC, N.O.S., 4.1, II

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is not listed.

- · Proposition 65
- · 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 not 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



GHS02

- · Signal word Danger
- · Hazard statements

H228 Flammable solid.

· Precautionary statements

P231 Handle under inert gas.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P222 Do not allow contact with air.

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

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

(Contd. on page 8)



Printing date 07/31/2016 Reviewed on 07/31/2016

Trade name: Lithium tetraphenylborate tris(1,2-dimethoxyethane)adduct, 98%

(Contd. of page 7)

*P501* Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director
- · Date of preparation / last revision 07/31/2016 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Sol. 1: Flammable solids, Hazard Category 1

us.