

Revision Date 05-Dec-2011

Revision Number 1

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

**Product Description:** Lithium, metal, in liquid paraffin  
**Cat No.** L/2000/46, L/2000/45

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

**Details of the supplier of the safety data sheet****Company**

Fisher Scientific UK  
Bishop Meadow Rd  
Loughborough, Leicestershire, Great Britain  
LE115RG  
Tel: 01509 231166

**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

Tel: 01509 231166 Chemtrec US: (800) 424-9300  
Chemtrec EU: 001 (202) 483-7616

**SECTION 2. HAZARDS IDENTIFICATION****Classification of the substance or mixture****REGULATION (EC) No 1272/2008**

Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Substances/mixtures which, in contact with water, emit flammable gases.	Category 1

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16*

**Symbol(s)** C - Corrosive  
F - Highly flammable

**R-phrases** R34 - Causes burns

**Risk Combination Phrases** R14/15 - Reacts violently with water, liberating extremely flammable gases

**Label Elements**

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**SECTION 2. HAZARDS IDENTIFICATION**

**Signal Word**
**Danger**
**Hazard Statements**

H314 - Causes severe skin burns and eye damage

H260 - In contact with water releases flammable gases which may ignite spontaneously

EUH014 - Reacts violently with water

**Precautionary Statements - EU (§28, 1272/2008)**

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

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P402 + P404 - Store in a dry place. Store in a closed container

P223 - Keep away from any possible contact with water, because of violent reaction and possible flash fire

P310 - Immediately call a POISON CENTER or doctor/ physician

**Other Hazards**

Lachrymator (substance which increases the flow of tears).

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Oil mist, mineral 8012-95-1	EEC No. 232-384-2	1.5	8012-95-1	Xi; R36	Eye Irrit. 2 (H319)	-
Lithium 7439-93-2	EEC No. 231-102-5	98.5	7439-93-2	R14 F; R15 C; R34	Skin Corr. 1B (H314) Eye Dam. 1 (H318) Water-react. 1 (H260)	-

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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**SECTION 4. FIRST AID MEASURES****Description of first aid measures****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Ingestion**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

**Notes to Physician**

Treat symptomatically

**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing media****Suitable Extinguishing Media**

Flooding quantities of water. Cool containers with flooding quantities of water until well after fire is out. Dry powder. Dry sand..

**Extinguishing media which must not be used for safety reasons**

Decomposition by contact with water may generate vapors which can be ignited by heat or open flame. Do not use halon type extinguisher. alcohol foam.

**Special hazards arising from the substance or mixture**

Reacts violently with water. Contact with water liberates extremely flammable gases. Thermal decomposition can lead to release of irritating gases and vapors.

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid dust formation.

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**Environmental precautions**

Should not be released into the environment.

**Methods and material for containment and cleaning up**

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Do not expose spill to water. Keep from any possible contact with water, because of violent reaction and possible flash fire. Keep away from clothing and other combustible materials.

**SECTION 7. HANDLING AND STORAGE**
**Precautions for Safe Handling**

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not allow contact with water. Avoid dust formation. Do not breathe vapors/dust. Do not ingest. Remove contaminated clothing and shoes. Do not allow contact with water because of violent reaction. Do not get water inside containers.

**Conditions for safe storage, including any incompatibilities**

Keep away from water. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from direct sunlight.

**Specific End Uses**
**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Control parameters**
**Exposure limits  
Component**

Oil mist, mineral

European Union	The United Kingdom	France	Belgium	Spain
			TWA: 5 mg/m <sup>3</sup> 8 uren STEL: 10 mg/m <sup>3</sup> 15 minuten	VLA-EC: 10 mg/m <sup>3</sup> 15 minutos VLA-ED: 5 mg/m <sup>3</sup> 8 horas

**Component**

Oil mist, mineral

Italy	Germany	Portugal	The Netherlands	Finland
		STEL: 10 mg/m <sup>3</sup> 15 minutos TWA: 5 mg/m <sup>3</sup> 8 horas	TWA: 5 mg/m <sup>3</sup> 8 uren	TWA: 5 mg/m <sup>3</sup> 8 tunteina

**Component**

Oil mist, mineral

Austria	Denmark	Switzerland	Poland	Norway
	TWA: 1 mg/m <sup>3</sup> 8 timer		NDSch: 10 mg/m <sup>3</sup> 15 minutach NDS: 5 mg/m <sup>3</sup> 8 godzinach	TWA: 1 mg/m <sup>3</sup> 8 timer STEL: 3 mg/m <sup>3</sup> 15 minutter.

**Component**

Bulgaria	Croatia	Ireland	Cyprus	Czech Republic

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Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Oil mist, mineral	TWA: 5.0 mg/m <sup>3</sup>				TWA: 5 mg/m <sup>3</sup> 8 hodinách. Ceiling: 10 mg/m <sup>3</sup>

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Oil mist, mineral			TWA: 5 mg/m <sup>3</sup>	Ceiling: 5 mg/m <sup>3</sup>	

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Oil mist, mineral		TWA: 1 mg/m <sup>3</sup> including smoke STEL: 3 mg/m <sup>3</sup>			TWA: 5 mg/m <sup>3</sup> 8 ore STEL: 10 mg/m <sup>3</sup> 15 minute
Lithium	TWA: 0.2 mg/m <sup>3</sup>				

Component	Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
Oil mist, mineral		5 1		STV: 3 mg/m <sup>3</sup> 15 minuter LLV: 1 mg/m <sup>3</sup> 8 timmar. including oil fumes	
Lithium	MAC: 0.02 mg/m <sup>3</sup>				

**Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)**

No information available.

**Predicted No Effect Concentration (PNEC)**

No information available.

**Exposure controls**
**Engineering Measures**

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location

**Personal protective equipment**
**Eye Protection**

Safety glasses with side-shields

**Hand Protection**

Protective gloves

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls**

No information available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**
**Physical State**  
**Appearance**  
**odor**

Solid  
Silver  
odorless

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

pH	No information available.
Boiling Point/Range	1317.2°C / 2403°F
Melting Point/Range	180.6°C / 357.1°F
Flash Point	178.9°C / 354°F
Autoignition Temperature	No information available.
Specific Gravity	0.534

**SECTION 10. STABILITY AND REACTIVITY**
Reactivity
Chemical Stability

Reacts violently with water, liberating highly flammable gases. Sensitivity to light. Stable under recommended storage conditions.

Possibility of Hazardous Reactions

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions .</b>	Reacts violently with water..

Conditions to Avoid

Incompatible products, Excess heat, Exposure to moist air or water, Exposure to moisture, Avoid dust formation, Exposure to light.

Incompatible Materials

Strong oxidizing agents, Water.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions..

**SECTION 11. TOXICOLOGICAL INFORMATION**
Information on Toxicological Effects
Acute Toxicity

**Product Information** See actual entry in RTECS for complete information.

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Oil mist, mineral	22 g/kg (Mouse)		

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**Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

Skin Respiratory system Eyes Gastrointestinal tract (GI)

**Endocrine Disruptor Information**

None known

**SECTION 12. ECOLOGICAL INFORMATION****Toxicity****Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**Persistence and degradability**

No information available

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment****Other adverse effects**

No information available

**SECTION 13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste from Residues / Unused  
Products**

Dispose of in accordance with local regulations

**Contaminated Packaging**

Empty containers should be taken to local recyclers for disposal

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**SECTION 14. TRANSPORT INFORMATION**
**IMDG/IMO**

UN-No 1415  
Hazard Class 4.3  
Packing Group I  
Proper Shipping Name LITHIUM

**ADR**

UN-No 1415  
Hazard Class 4.3  
Packing Group I  
Proper Shipping Name LITHIUM

**IATA**

UN-No 1415  
Hazard Class 4.3  
Packing Group I  
Proper Shipping Name LITHIUM

**SECTION 15. REGULATORY INFORMATION**
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Oil mist, mineral	232-384-2	-		X	X	-	X	X	X	X	X
Lithium	231-102-5	-		X	X	-	X	-	X	X	X

Legend
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances



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KECL - Existing and Evaluated Chemical Substances

**Chemical Safety Assessment****SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R36 - Irritating to eyes

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Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet