

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Lithium Hydride, 98%
 Catalog Numbers:
 AC191190000, AC191190050, AC191191000, AC191195000
 Synonyms:
 LIH, Lithium Monohydride.
 Company Identification (Europe): Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium
 Company Identification (USA): Acros Organics
 One Reagent Lane
 Fairlawn, NJ 07410
 For information in North America, call: 800-ACROS-01
 For information in Europe, call: 0032(0) 14575211
 For emergencies in the US, call CHEMTREC: 800-424-9300
 For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
7580-67-8	Lithium Hydride	98	231-484-3

Hazard Symbols: F C
 Risk Phrases: 14/15 35

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Reacts violently with water liberating highly flammable gases.
 Causes severe burns. Corrosive. Light sensitive.

Potential Health Effects

Eye:

Causes eye burns.

Skin:

Causes skin burns.

Ingestion:

May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns.

Inhalation:

Causes chemical burns to the respiratory tract.

Chronic:

No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin:

Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Water

Reactive. Material will react with water and may release a flammable and/or toxic gas. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media:

DO NOT USE WATER! Use only graphite powder, soda ash, powdered sodium chloride, or an appropriate metal-fire-extinguishing dry powder. Do NOT get water inside containers. Cool containers with flooding quantities of water until well after fire is out. For large fires, use dry sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not get water on spilled substances or inside containers.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Store protected from light. Discard contaminated shoes.

Storage:

Keep container closed when not in use. Keep away from water. Corrosives area. Store protected from light.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

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:

Wear butyl rubber gloves, apron, and/or clothing. Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear butyl rubber gloves, apron, and/or clothing. Wear appropriate protective clothing to minimize contact with skin.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR :1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use. Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Crystalline powder
Appearance:	off-white to gray
Odor:	odorless
pH:	Not available.
Vapor Pressure:	0 mm Hg @ 20C
Vapor Density:	Not available.
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	Not available.
Freezing/Melting Point:	680 deg C
Autoignition Temperature:	200 deg C (392.00 deg F)
Flash Point:	Not available.

Explosion Limits, lower: N/A
Explosion Limits, upper: N/A
Decomposition Temperature:
Solubility: Decomposes.
Specific Gravity/Density: .8200g/cm3
Molecular Formula: HLi
Molecular Weight: 7.95

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, light, moisture, excess heat, strong oxidants, moist air.
Incompatibilities with Other Materials:
Strong oxidizing agents.
Hazardous Decomposition Products:
Irritating and toxic fumes and gases, hydrogen gas, lithium hydroxide, hydrogen gas, lithium hydride.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 7580-67-8: OJ6300000
LD50/LC50:
CAS# 7580-67-8: Oral, rat: LD50 = 77500 ug/kg.
Carcinogenicity:
Lithium Hydride -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
Shipping Name: LITHIUM HYDRIDE
Hazard Class: 4.3
UN Number: UN1414
Packing Group: I
Canadian TDG
Shipping Name: LITHIUM HYDRIDE
Hazard Class: 4.3
UN Number: UN1414

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA

CAS# 7580-67-8 is listed on the TSCA inventory.
This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Lithium Hydride can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F C

Risk Phrases:

R 14/15 Reacts violently with water liberating highly flammable gases.
R 35 Causes severe burns.

Safety Phrases:

S 7/8 Keep container tightly closed and dry.
S 25 Avoid contact with eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7580-67-8: No information available.

United Kingdom Occupational Exposure Limits

CAS# 7580-67-8: OES-United Kingdom, TWA 0.025 mg/m3 TWA

Canada

CAS# 7580-67-8 is listed on Canada's NDSL List.

CAS# 7580-67-8 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 7580-67-8: OEL-AUSTRALIA:TWA 0.025 mg/m3
OEL-BELGIUM:TWA 0.025 mg/m3
OEL-DENMARK:TWA 0.025 mg/m3
OEL-FINLAND:TWA 0.025 mg/m3;STEL 0.075 mg/m3 JAN9
OEL-FRANCE:TWA 0.025 mg/m3
OEL-GERMANY:TWA 0.025 mg/m3
OEL-THE NETHERLANDS:TWA 0.025 mg/m3
OEL-THE PHILIPPINES:TWA 0.025 mg/m3
OEL-SWITZERLAND:TWA 0.025 mg/m3
OEL-TURKEY:TWA 0.025 mg/m3
OEL-UNITED KINGDOM:TWA 0.025 mg/m3
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 4/03/1998 Revision #1 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.
