

Material Safety Data Sheet

Ethylmagnesium bromide, 40% in diethyl ether

ACC# 02559

Section 1 - Chemical Product and Company Identification

MSDS Name: Ethylmagnesium bromide, 40% in diethyl ether

Catalog Numbers: AC347290000, AC347290010, AC347291000

Synonyms:

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
60-29-7	diethyl ether	60%	200-467-2
925-90-6	Ethylmagnesium bromide	40%	213-127-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available.

Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns.

Skin: Causes skin burns.

Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns. May cause liver and kidney damage.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes chemical burns to the respiratory tract.

Chronic: Not available.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove all contaminated clothing immediately.

Ingestion: Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

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. Vapors can travel to a source of ignition and flash back. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Extremely flammable liquid and vapor. Containers may explode in the heat of a fire.

Extinguishing Media: Do NOT use carbon dioxide. Use dry chemical to fight fire. DO NOT USE WATER!

Flash Point: -40 deg C (-40.00 deg F)

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: 1 - health, 4 - flammability, 1 - instability

Section 6 - Accidental Release Measures

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

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not expose spill to water.

Section 7 - Handling and Storage

Handling: Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Handle under an inert atmosphere. Do not allow contact with water. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Water free area. Store under an inert atmosphere.

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.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
diethyl ether	400 ppm TWA; 500 ppm STEL	1900 ppm IDLH	400 ppm TWA; 1200 mg/m3 TWA
Ethylmagnesium bromide	none listed	none listed	none listed

OSHA Vacated PELs: diethyl ether: 400 ppm TWA; 1200 mg/m3 TWA Ethylmagnesium bromide: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Not available.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: light yellow

Odor: ether-like

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Not available.

Specific Gravity/Density: 1.03

Molecular Formula: C₂H₅BrMg

Molecular Weight: 133.244

Section 10 - Stability and Reactivity

Chemical Stability: Not available.

Conditions to Avoid: Incompatible materials, ignition sources, contact with water.

Incompatibilities with Other Materials: Oxidizing agents, acids, alcohols.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 60-29-7: KI5775000

CAS# 925-90-6 unlisted.

LD50/LC50:

CAS# 60-29-7:

Draize test, rabbit, eye: 100 mg Moderate;

Inhalation, mouse: LC50 = 31000 ppm/30M;

Oral, mouse: LD50 = 1760 mg/kg;

Oral, rat: LD50 = 1215 mg/kg;

Skin, rabbit: LD50 = >20 mL/kg;

CAS# 925-90-6:

Carcinogenicity:

CAS# 60-29-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 925-90-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: No data available.
Neurotoxicity: No data available.
Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series:

CAS# 60-29-7: waste number U117 (Ignitable waste).

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE	No information available.
Hazard Class:	4.3	
UN Number:	UN3399	
Packing Group:	I	

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 60-29-7 is listed on the TSCA inventory.

CAS# 925-90-6 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 60-29-7: 100 lb final RQ; 45.4 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 60-29-7: immediate, fire, sudden release of pressure, reactive.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

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

CAS# 60-29-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 925-90-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

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:

XN F+ C

Risk Phrases:

R 12 Extremely flammable.

R 15 Contact with water liberates extremely flammable gases.

R 19 May form explosive peroxides.

R 22 Harmful if swallowed.

R 34 Causes burns.

Safety Phrases:

- S 16 Keep away from sources of ignition - No smoking.
- S 29 Do not empty into drains.
- S 33 Take precautionary measures against static discharges.
- 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).
- S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

- CAS# 60-29-7: 1
- CAS# 925-90-6: No information available.

Canada - DSL/NDSL

- CAS# 60-29-7 is listed on Canada's DSL List.
- CAS# 925-90-6 is listed on Canada's NDSL List.

Canada - WHMIS

- WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

- CAS# 60-29-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 3/29/2000

Revision #2 Date: 10/03/2005

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 event shall Fisher 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 Fisher has been advised of the possibility of such damages.