Ethyl 2-bromopropionate 535-11-5 MSDS

Name:	DL-Ethyl 2-Bromopropionate 99% Material Safety Data Sheet
Synonym:	
CAS:	535-11-5

Section 1 - Chemical Product

MSDS Name:DL-Ethyl 2-Bromopropionate 99% Material Safety Data Sheet

Synonym:

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content
535-11-5	DL-Ethyl 2-Bromopropionate	99

Hazard Symbols: XI

Risk Phrases: 10 36/37/38

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable. Irritating to eyes, respiratory system and skin. The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye:

May cause eye irritation. Lachrymator (substance which increases the flow of tears). The toxicological properties of this material have not been fully investigated.

Skin:

May cause skin irritation. The toxicological properties of this material have not been fully investigated.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation:

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Vapors may cause dizziness or suffocation.

Chronic:

No information found.

Section 4 - FIRST AID MEASURES

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

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

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:

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

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. Vapors may form an explosive mixture with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Extinguishing Media:

Use water spray to cool fire-exposed containers. Water may be ineffective. Use agent most appropriate to extinguish fire. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Flammables-area.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 535-11-5: 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 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 Color: clear, colorless Odor: None reported. pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 156 - 160 deg C @ 760.00mm Hg

Freezing/Melting Point: Not available. Autoignition Temperature: Not available. Flash Point: 51 deg C (123.80 deg F) Explosion Limits, lower: Not available. Explosion Limits, upper: Not available.

Decomposition Temperature: Solubility in water: insoluble

Specific Gravity/Density: 1.3940g/cm3

Molecular Formula: C5H9Br02 Molecular Weight: 181.03

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat, electrical sparks, exposure to flame.

Incompatibilities with Other Materials:

Oxidizing agents, reducing agents, acids, bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 535-11-5: UA2451730 LD50/LC50:

Not available.

Carcinogenicity:

DL-Ethyl 2-Bromopropionate - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

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

Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: FLAMMABLE LIQUID, N.O.S.*

Hazard Class: 3 UN Number: 1993 Packing Group: III

IMO

Shipping Name: FLAMMABLE LIQUID, N.O.S.

Hazard Class: 3.3

UN Number: 1993 Packing Group: III

RID/ADR

Shipping Name: FLAMMABLE LIQUID, N.O.S.

Hazard Class: 3 UN Number: 1993 Packing group: III

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 10 Flammable.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No smoking.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water.

S 33 Take precautionary measures against static discharges.

S 37 Wear suitable gloves.

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# 535-11-5: No information available.

Canada

CAS# 535-11-5 is listed on Canada's NDSL List.

CAS# 535-11-5 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 535-11-5 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A