









255 Norman.
Lachine (Montreal), Que
H8R 1A3

Material Safety Data Sheet

EMERGENCY NUMBERS:

(USA) CHEMTREC : 1(800) 424-9300 (24hrs)
(CAN) CANUTEC : 1(613) 996-6666 (24hrs)
(USA) Anachemia : 1(518) 297-4444
(CAN) Anachemia : 1(514) 489-5711

| WHMIS | Protective Clothing | TDG Road/Rail |
|---|---|---|
| WHMIS CLASS: B-2 | | TDG CLASS: 3 PIN: UN1993 PG: III |
|  |     |  |

Section I. Product Identification and Uses

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|------------------|---|----------------|----------------|
| Product name | ETHYL ISO-VALERATE | CI# | Not available. |
| Chemical formula | (CH ₃) ₂ CHCH ₂ CO ₂ C ₂ H ₅ | CAS# | 108-64-5 |
| Synonyms | AC-4416, 40434 | Code | AC-4416 |
| Supplier | Anachemia Canada. 255 Norman. Lachine (Montreal), Que H8R 1A3 | Formula weight | 130.19 |
| | | Supersedes | |
| Material uses | For laboratory use only. | | |

Section II. Ingredients

| Name | CAS # | % | TLV |
|-----------------------|----------|----|--------------------------|
| 1) ETHYL ISO-VALERATE | 108-64-5 | 98 | Not established by ACGIH |

Toxicity values of the hazardous ingredients

ETHYL ISO-VALERATE:
ORAL (LD₅₀): Acute: 7031 mg/kg (Rabbit).
INTRAPERITONEAL (LD₅₀): Acute: 1200 mg/kg (Rat).

Section III. Physical Data

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| Physical state and appearance / Odor | Colorless liquid. Apple-like odor. |
| pH (1% soln/water) | Not available. |
| Odor threshold | Not available. |
| Percent volatile | Not available. |
| Freezing point | -99°C |
| Boiling point | 131 to 133°C |
| Specific gravity | 0.868 (Water = 1) |
| Vapor density | Not available. |
| Vapor pressure | 7.5 mm of Hg (@ 20°C) |
| Water/oil dist. coeff. | Not available. |
| Evaporation rate | Not available. |
| Solubility | Soluble in cold water. |

Section IV. Fire and Explosion Data

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| Flash point | CLOSED CUP: 26°C |
| Flammable limits | Not available. |
| Auto-ignition temperature | Not available. |
| Fire degradation products | Oxides of carbon (CO, CO ₂). |
| Fire extinguishing procedures | Use DRY chemical, carbon dioxide, or foam. Water may be ineffective to extinguish fires. Wear adequate personal protection to prevent contact with material or its combustion products. Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. Cool containing vessels with flooding quantities of water. |
| Fire and Explosion Hazards | Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back, eliminate all sources of ignition. Vapor forms explosive mixture with air. Container explosion may occur under fire conditions or when heated. Contact with oxidizers may cause fire and/or explosion. Expected to be sensitive to static discharge. The sensitivity to impact is not available. Emits toxic fumes under fire conditions. |

Section V. Toxicological Properties

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|---------------------------|---|
| Routes of entry | Ingestion and inhalation. Eye contact. Skin contact. |
| Effects of Acute Exposure | May be harmful by ingestion, inhalation, or by skin absorption. May cause irritation. |
| Eye | No specific information is available on this material. |
| Skin | No specific information is available on this material. IRRITATION: SKIN-RABBIT 500 mg/24H MILD. |
| Inhalation | No specific information is available on this material. |
| Ingestion | No specific information is available on this material. |

Section V. Toxicological Properties

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|--|---|
| Effects of Chronic Overexposure | Carcinogenic effects: Not available. Mutagenic effects: Not available. Teratogenic effects: Not available. Toxicity of the product to the reproductive system: Not available. To the best of our knowledge, the chemical, physical, and toxicity of this substance has not been fully investigated. |
|--|---|

Section VI. First Aid Measures

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|---------------------|--|
| Eye contact | Immediately flush eyes with copious quantities of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Call a physician. |
| Skin contact | Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reusing. |
| Inhalation | Remove patient to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Call a physician. |
| Ingestion | If conscious, wash out mouth with water. Never give anything by mouth to an unconscious or convulsing person. Call a physician. Call a physician. |

Section VII. Reactivity Data

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|-----------------------------------|---|
| Stability | Stable. Conditions to avoid: High temperatures, sparks, open flames and all other sources of ignition, contamination. |
| Hazardous decomp. products | Not available. |
| Incompatibility | Oxidizing agents, acids, bases, reducing agents. |
| Reaction Products | Not available. Hazardous polymerization will not occur. |

Section VIII. Preventive Measures

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Protective Clothing in case of spill and leak Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

Spill and leak Evacuate the area. Eliminate all sources of ignition. Cover with dry soda ash, sand or lime. Place in a suitable container and mark for disposal. Use non-sparking tools. Transport outdoors. Ventilate area and wash spill site after material pick up is complete. DO NOT empty into drains. DO NOT touch damaged container or spilled material. Runoff to sewer may create fire or explosion hazard.

Waste disposal Burn in a chemical incinerator equipped with an after burner and scrubber. According to all applicable regulations. May be harmful to aquatic life. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

Storage and Handling Store in a cool place away from heated areas, sparks, and flame. Store in a well ventilated area. Store away from incompatible materials. Do not add any other material to the container. Do not wash down the drain. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from direct sunlight or strong incandescent light. Keep container tightly closed and dry. Manipulate under an adequate fume hood. Take precautionary measures against electrostatic discharges. Ground the container while dispensing. Ground all equipment containing material. Use only explosion proof equipment. Use non-sparking tools. Watch for accumulation in low confined areas. Empty containers may contain a hazardous residue. Handle and open container with care. Take off immediately all contaminated clothing. This product must be manipulated by qualified personnel. Do not get in eyes, on skin, or on clothing. Wash well after use. In accordance with good storage and handling practices. Do not allow smoking and food consumption while handling.

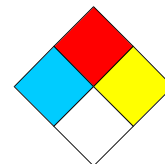
Section IX. Protective Measures

Protective clothing Splash goggles. Impervious gloves, apron, coveralls, and/or other resistant protective clothing. Sufficient to protect skin. A OSHA/MSHA jointly approved respirator is advised in the absence of proper environmental controls. For emergency situations, a self-contained respirator is recommended (NIOSH-approved). Do not wear contact lenses. Make eye bath and emergency shower available. Ensure that eyewash station and safety shower is proximal to the work-station location.

Engineering controls Use only in a chemical fume hood. Use adequate ventilation. Do not use in unventilated spaces.

Section X. Other Information

Special Precautions or comments Flammable liquid! To the best of our knowledge, the chemical, physical and toxicity of this substance has not been fully investigated. Do not breathe vapor. Avoid all contact with the product. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Keep away from heat, sparks and flame. Use non-sparking tools. Handle and open container with care. Container should be opened only by a technically qualified person.
RTECS NO: NY1504000 (Ethyl isovalerate).



NFPA

Prepared by MSDS Department/Département de F.S..

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Telephone# (514) 489-5711

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