

MATERIAL SAFETY DATA SHEET

Product Name: Ethyl acetate

CAS No.: 141-78-6

Version: 0

1. Identification

Product Code : 90021, 90162, 90406, 90891
Company Name : Advent Chembio Private Limited
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2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
ETHYL ACETATE	141-78-6	99- 100%

3. Hazards Identification

Hazard classification

Physical hazards

Flammable liquids : Category 2

Health hazards

Skin corrosion/irritation : Category 3

Serious eye damage/eye irritation : Category 2

Specific target organ toxicity - single exposure : Category 3

Labels elements

Hazard symbol



Signal word : Danger

Hazard statement : Highly flammable liquid and vapor.
 Causes serious eye irritation.
 May cause respiratory irritation.
 May cause drowsiness or dizziness .

Precautionary statement

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Prevention	: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/eye protection/face protection. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling .
Response	: In case of fire: Use water spray, foam, dry powder or carbon dioxide for extinction. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
Storage	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	: Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

4. First Aid Measures

General information	: Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
Ingestion	: Call a physician or poison control center immediately. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Inhalation	: Move to fresh air. Get medical attention if symptoms persist.
Skin contact	: Wash skin thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
Eye contact	: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Most important symptoms/effects, acute and delayed	: Irritating to eyes, respiratory system and skin.
Indication of immediate medical attention and special treatment needed	: Treat symptomatically. Symptoms may be delayed.

MATERIAL SAFETY DATA SHEET**Product Name:** Ethyl acetate**CAS No.:** 141-78-6**Version:** 0**5. Fire fighting measures****General fire hazards** : Flammable liquid and vapor.**Suitable (and unsuitable) extinguishing media****Suitable extinguishing media** : Water spray, foam, dry powder or carbon dioxide.**Unsuitable extinguishing media** : Avoid water in straight hose stream; will scatter and spread fire.**Specific hazards arising from the chemical** : Can be ignited easily and burns vigorously. Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations .**Special protective equipment and precautions for firefighters****Special fire fighting procedures** : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out. Water may be ineffective in fighting the fire. Fight fire from a protected location .**Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.**6. Accidental Release Measures****Personal precautions, protective equipment and emergency procedures** : Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.**Methods and material for containment and cleaning up** : Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal. Eliminate all ignition sources if safe to do so. Use only non-sparking tools. All equipment used when handling the product must be grounded.**Notification Procedures** : Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.**Environmental precautions** : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground .

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7. Handling and Storage

- Precautions for safe handling** : DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Use personal protective equipment as required. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash hands thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a cool, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable .

8. Exposure Controls Personal Protection

Control parameters

Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
DIMETHYL ACETAMIDE	TWA	400 ppm	US. ACGIH Threshold Limit Values (2011)
	REL	400 ppm 1400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	400 ppm 1400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	400 ppm 1400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate engineering controls : No data available.

Individual protection measures, such as personal protective equipment

General information : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment .

Eye/face protection : Wear safety glasses with side shields (or goggles) and a face shield.

Hand protection : Chemical resistant gloves .

Other : Wear suitable protective clothing.

Respiratory protection : If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Chemical respirator

MATERIAL SAFETY DATA SHEET**Product Name:** Ethyl acetate**CAS No.:** 141-78-6**Version:** 0**Hygiene measures**

- with organic vapor cartridge and full face piece.
- : Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and Chemical Properties

Appearance	: Colorless liquid.
Odor	: Fruity .
pH	: No data available.
Melting point/freezing point	: -83 °C
Initial boiling point and boiling range	: 77 °C
Flash Point	: -4 °C
Vapor pressure	: 12.4 kPa (25 °C)
Vapor density	: 3.04 AIR=1
Relative density	: 0.9 (20 °C)
Solubility in water	: 100 g/l (25 °C)
Solubility (other)	: No data available.
Formula	: CH ₃ COOC ₂ H ₅
Molecular Weight	: 88.10

10. Stability and Reactivity

Reactivity	: No dangerous reaction known under conditions of normal use .
Chemical stability	: Material is stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Heat, sparks, flames.
Incompatible materials	: Strong oxidizing agents. Strong alkalis. Strong acids. Nitrates. May attack some plastics, rubber and coatings.
Hazardous decomposition products	: Thermal decomposition may release oxides of carbon.

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11. Toxicological Information

Information on likely routes of exposure

- Ingestion** : Irritating. May cause nausea, stomach pain and vomiting.
- Inhalation** : May cause irritation to the respiratory system. May cause drowsiness or dizziness.
- Skin contact** : Causes mild skin irritation.
- Eye contact** : Causes serious eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

- Oral Product** : LD 50 (Rat): 5.6 g/kg
- Dermal Product** : LD 50 (Rabbit): > 18,000 mg/kg .
- Inhalation Product** : LD 50 (Mouse, 4 h): 1,500 mg/l .
- Repeated dose toxicity Product** : No data available.
- Skin corrosion/irritation Product** : Causes mild skin irritation.
- Serious eye damage/eye irritation Product** : Causes serious eye irritation.
- Respiratory or skin sensitization Product** : Not a skin sensitizer.
- Carcinogenicity Product** : This substance has no evidence of carcinogenic properties .
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE** : No carcinogenic components identified.
- US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE** : No carcinogenic components identified.
- US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050** : No carcinogenic components identified.
- Germ cell mutagenicity**
- In vitro Product** : No mutagenic components identified .
- In vivo Product** : No mutagenic components identified .
- Reproductive toxicity Product** : No mutagenic components identified .
- Specific target organ toxicity - single exposure Product** : Narcotic effect. Respiratory tract irritation .
- Specific target organ toxicity - repeated exposure Product** : None known.
- Aspiration hazard Product** : May be harmful if swallowed and enters airways .
- Other effects** : No data available.

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12. Ecological Information

Ecotoxicity

Acute hazards to the aquatic environment :

- Fish Product** : No data available .
- Specified substance(s):** LC 50 (Fathead minnow (Pimephales promelas), 96 h): 220 - 250 mg/l Mortality
- ETHYL ACETATE** LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 352 - 500 mg/l Mortality
- LC 50 (Carp (Leuciscus idus melanotus), 48 h): 270 mg/l Mortality
- Aquatic invertebrates Product** : No data available.
- Specified substance(s): ETHYL ACETATE** : EC 50 (Brine shrimp (Artemia salina), 24 h): 306.9 - 389.9 mg/l Intoxication
- LC 50 (Hydra (Hydra oligactis), 48 h): 1,350 mg/l Mortality
- LC 50 (Water flea (Daphnia cucullata), 48 h): 154 mg/l Mortality .

Chronic hazards to the aquatic environment :

- Fish Product** : No data available.
- Aquatic invertebrates Product** : No data available.
- Toxicity to Aquatic Plants Product:** : No data available.
- Persistence and degradability**
- Biodegradation Product** : Expected to be readily biodegradable.
- BOD/COD ratio Product** : No data available.
- Bioaccumulative potential**
- Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.
- Partition coefficient n-octanol / water (log Kow) Product** : Log Kow: 0.73
- Mobility in soil** : The product is water soluble and may spread in water systems.
- Other adverse effects** : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment .

13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws.
- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

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14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN 1173	ETHYL ACETATE	3	II	No
IMDG	UN 1173	ETHYL ACETATE	3	II	No
IATA	UN 1173	ETHYL ACETATE	3	II	No

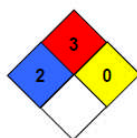
15. Regulatory Information

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

Safety, health and environmental regulations/legislation specific for the substance or mixture
 No Data Available.

16. Other Information

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date :01/08/2014

Version :0

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