

MATERIAL SAFETY DATA SHEET

Ethyl Acetate

SECTION 1 . Product and Company Identification

Product Name and Synonym: Ethyl Acetate
Product Code: E2401
Material Uses:
Manufacturer: Science Stuff
1104 Newport Ave
Austin, TX 78753
(512) 837-6020
Entry Date : 6/4/2013
Print Date: 6/4/2013
24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	2			
Flammability:	3			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA=Not Applicable		NE=Not Established		

SECTION 2 HAZARD IDENTIFICATION

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Physical state: Liquid. [Colorless]
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview:
WARNING!
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
MAY BE HARMFUL IF INHALED OR SWALLOWED
MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS:
KIDNEYS, LIVER,
RESPIRATORY TRACT, SKIN, EYES
VAPOR MAY CAUSE FLASH FIRE.
FLAMMABLE LIQUID AND VAPOR.

Keep away from heat, sparks and flame.
Do not ingest.
Avoid breathing vapor or mist.
Keep container tightly closed and sealed until ready for use. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry:
Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects:

Eyes: Irritating to eyes
Skin: Irritating to skin
Inhalation: Irritating to respiratory system. May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity/ Reproductive toxicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
Target organs: May cause damage to the following organs:
kidneys, liver,

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upper respiratory tract, skin, eyes
Medical conditions aggravated by over-exposure:
Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk
may be aggravated by over-exposure to this product

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Ethyl Acetate	CAS# 141-78-6	100 %	W/W	TXDS: orl-rat LD ₅₀ : 11 g/Kg

SECTION 4 FIRST AID MEASURES

Keep away from heat and ignition sources. Harmful if swallowed. Avoid breathing vapors. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type:	Carbon Dioxide, dry chemical powder or appropriate foam. Water may be effective for cooling, but may not extinguish.
Fire / Explosion Hazards:	Fire possible at elevated temperatures. Dust in sufficient quantities can be a dust explosion hazard.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Evacuate area. Wear self-contained breathing apparatus and protective clothing. Eliminate all sources of ignition. Cover with activated carbon absorbent, take up place in closed containers. Vent area and wash spill.

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via

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a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. Dilute with water and mop up if water- soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

SECTION 7 HANDLING AND STORAGE

ethyl acetate is slowly decomposed by moisture. It reacts explosively with lithium aluminum hydride

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH/MSHA-approved respirator

Ventilation

Local Exhaust

Mechanical

Protective Gloves: NIOSH Approved Gloves

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure.ansi approved emergency eye wash and deluge showe
Product name - United States –

Ethyl Acetate

ACGIH TLV (United States, 1/2008)

TWA: 400 ppm 8 hour(s)

TWA: 1440 mg/m³ 8 hour(s)

OSHA PEL 1989 (United States, 3/1989)

TWA: 400 ppm 8 hour(s)

TWA: 1440 mg/m³ 8 hour(s)

NIOSH REL (United States, 6/2008)

TWA: 400 ppm 8 hour(s)

TWA: 1440 mg/m³ 8 hour(s)

OSHA PEL (United States, 11/2006)

TWA: 400 ppm 8 hour(s)

TWA: 1440 mg/m³ 8 hour(s)

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TWA: 400 ppm 8 hour(s)

TWA: 1440 mg/m³ 8 hour(s)

Engineering measurers: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep

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worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Recommended: splash goggles

Skin: Personal protective equipment for the body should be selected based on the task being performed and risks involved and should be approved by a specialist before handling this product.

Body recommended: lab coat

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	-84°C	Percent Volatile by Volume:	
Boiling Point:	77°C	Evaporation Rate	n/a
Vapor Pressure:	73@20°C	Evaporation Standard	Not Applicable
Vapor Density:	3	Auto Ignition Temp	Not applicable
Solubility in Water:	n/a	Lower Flamm. Limit in Air	2.2%@38°C
Appearance /Odors:	white powder	Upper Flamm. Limit in Air	11.5%@38°C
Flash Point:	-3.3°C		
Specific Gravity:	0.902		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	None known

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Materials to Avoid:	Oxidizing agents, metals, bases, amines.
Hazardous Decomposition Products:	Toxic fumes of: Carbon Monoxide, Carbon Dioxide
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	not relevant

SECTION 11 Toxicological Information

Toxicity data- United States- Product/ ingredient name:

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LD50	>20 mL/kg	Dermal	Rabbit
LD50	4100 mg/kg	Oral	Mouse
LD50	5620 mg/kg	Oral	Rat
LD50	4935 mg/kg	Oral	Rabbit
LDLo	5 g/kg	Subcutaneous	Rat
LC50	1600 ppm	Inhalation Gas	Rat
LC50	>6000 ppm	Inhalation Gas	Rat

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

SECTION 12 Ecological Information

Aquatic toxicity

Product/ ingredient name

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Acute EC50	5600 mg/L	Algae	48 hours
Acute EC50	3300 mg/L	Algae	48 hours
Acute EC50	260 mg/L	Fish	48 hours
Acute LC50	425.3 mg/L	Fish	96 hours
Acute LC50	484 mg/L	Fish	96 hours
Acute LC50	230 mg/L	Fish	96 hours
Acute LC50	560000 ug/L	Fresh – Water flea – Daphnia magna	<1 days 48 hours
Acute LC50	48400 to 602000 ug/L	Fresh water Fish – Rainbow trout – Oncorhynchus mykiss – Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Acute LC50	425300 to 500000 ug/L	Fresh water Fish – rainbow trout, donalson trout – Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Acute LC50	295000 ug/L	Fresh water Daphnia – Water flea – Daphnia pulex	<1 days 48 hours
Acute LC50	295000 ug/L	Fresh water Fish – Fathead minnow – Pimephales promelas	– 29 to 30 days – 18.2 mm – 0.106 g 96 hours
Acute LC50	230000 ug/L	Fresh water Daphnia – Water flea – Daphnia pulex	<1 days 48 hours
Acute LC50	212500 to 225420 ug/L	Fresh water Fish – Indian catfish – Heteropneustes fossilis	– 14.16 cm – 25.54 g 96 hours
Acute LC50	175000 ug/L	Fresh water Daphnia – Water flea – Daphnia cucullata	– 11 days 48 hours
Acute LC50	154000 ug/L	Fresh water Daphnia – Water flea – Daphnia cucullata	– 11 days 48 hours
Acute LC50	1600000 ug/L	Fresh water Crustaceans – Aquatic sowbug – Asellus aquaticus	48 hours
Acute LC50	819000 ug/L	Fresh water Daphnia – Water flea – Daphnia magna	<1 days 48 hours
Acute LC50	786000 ug/L	Fresh water Daphnia – Water flea – Daphnia magna	<1 days 48 hours
Acute LC50	778000 ug/L	Fresh water Daphnia – Water flea – Daphnia magna	<1 days 48 hours
Acute LC50	698000 ug/L	Fresh water Daphnia – Water flea – Daphnia magna	<1 days 48 hours
Acute LC50	660000 ug/L	Fresh water Daphnia – Water flea – Daphnia magna	<1 days 48 hours

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Environmental effects : No known significant effects or critical hazards.
Other adverse effects : No known significant effects or critical hazards.

SECTION 13 Disposal Considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 Transport Information

DOT Classification: Ethyl Acetate, 3, UN1173, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

United States

HCS Classification:
Target organ effects
Irritating material
Flammable liquid

U.S. Federal regulations:

United States inventory (TSCA 8b): listed
TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.
SARA 302/304/311/312 extremely hazardous substances: No products were found
SARA 302/304 emergency planning and notifications: No products were found
SARA 302/304/311/312 hazardous chemicals: Ethyl Acetate
SARA 311/312 MSDS distribution- Chemical inventory- hazard identification: Ethyl Acetate
Fire Hazard:
Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found
Clean Water Act (CWA) 311: No products were found
Clean Air Act (CAA) 112 accidental release prevention: No products were found
Clean Air Act (CAA) 112 regulated flammable substance: No products were found.
Clean Air Act (CAA) 112 regulated toxic substance: No products were found
DEA List I Chemicals : not listed
(Precursor Chemicals)
DEA List II Chemicals : not listed
(essential Chemicals)

Massachusetts Substance : This material is listed.
New Jersey Hazardous Substances : This material is listed.
New York Acutely Hazardous Substances : This material is listed.
Pennsylvania RTK Hazardous Substances : This material is listed.

Canada

WHMIS (Canada) :
Class B-2 : Flammable liquid
Class D-2B: Material causing other toxic effects (Toxic).
Canadian lists : CEPA Toxic Substance: This material is not listed.
Canadian ARET: This material is not listed.
Canadian NPRI: This material is listed.
Alberta Designated Substances: This material is not listed.
Ontario Designated Substances: This material is not listed.
Quebec Designated Substances: This material is not listed.

CEPA DSL/ CEPA NDSL : CEPA DSL:

This material is listed or exempted.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

SECTION 16 Additional Information

Ethyl Acetate

Flammability

Health

Reactivity

Revisions

NFPA

0.1

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.