

# MATERIAL SAFETY DATA SHEET

Ethyl Acetate

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Ethyl Acetate  
Product Code: E2404  
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.

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

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

Physical state: Liquid (Colorless.)

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200).

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

Potential acute health effects:

Inhalation: Irritating to respiratory system, May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Skin: Irritating to skin.

Eyes: Irritation to eyes.

Potential chronic health effects:

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: 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, 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.

See toxicological information (section 11)

## SECTION 3 MIXTURE COMPONENTS

Ethyl Acetate

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 <sub>50</sub> : 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: If swallowed, induce vomiting immediately after giving two glasses of water. 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. (see section 8)

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).

**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

Ethyl Acetate
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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

Exposure controls / personal protection

Ingredient

Exposure limits

Ethyl Acetate ACGIH TLV (United States, 1/2008).

TWA: 400 ppm 8 hour(s)

TWA: 1400 mg/m<sup>3</sup> 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 400 ppm 8 hour(s)

TWA: 1400 mg/m<sup>3</sup> 8 hour(s).

NIOSH REL (United States, 6/2008).

TWA: 400 ppm 10 hour(s)

TWA: 1400 mg/m<sup>3</sup> 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 400 ppm 8 hour(s)

TWA: 1400 mg/m<sup>3</sup> 8 hour(s).

Consult local authorities for acceptable exposure limits.

Engineering measurers: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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: face shield safety glasses with side-shields

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: chemical-resistant protective suit safety apron lab coat and gloves

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.

Recommended: Vapor respirator. Be sure to use an approved/ certified respirator or equivalent. Vapor respirator or self-contained breathing apparatus (SCBA)

# Ethyl Acetate

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.  
Recommended: nitrile rubber

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	-84°C	Percent Volatile by Volume:	
Boiling Point:	77°C	Evaporation Rate	Information not available
Vapor Pressure:	73@20°C	Evaporation Standard	
Vapor Density:	3	Auto Ignition Temp	Information not available
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
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

Acute toxicity						
Product/ingredient name						
Ethyl Acetate	Test	Route	Species	Result		
	LD50	Dermal	Rabbit	>20 mL/kg		
	LD50	Oral	Mouse	4100 mg/kg		
	LD50	Oral	Rat	5620 mg/kg		
	LD50	Oral	Rabbit	4935 mg/kg		
	LDLo		Rat	5 g/kg		
Subcutaneous						
	LC50	Inhalation	Rat	1600 ppm		
Gas.						
	LC50	Inhalation	Rat	>6000 ppm		
Gas.						
Carcinogenicity						
Classification						
Product/ingredient name						
	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Ethyl Acetate A4						
No known significant effects or critical hazards.						
Mutagenicity						
No known significant effects or critical hazards.						
Teratogenicity						
No known significant effects or critical hazards.						

## SECTION 12 Ecological Information

Aquatic ecotoxicity

# Ethyl Acetate

## Product/ingredient name

Ethyl Acetate

Result	Species	Exposure
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	Daphnia-Water Flea	48 hours
Fresh water	Daphnia magna	- < 1 days
Acute LC50 484000 to 602000 ug/L	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Acute LC50 425300 to 500000 ug/L	Fresh water trout, donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	- 96 hours
Acute LC50 295000 ug/L	Daphnia - Water Flea	- 48 hours
Fresh water	Daphnia pulex	- < 1 days
Acute LC50 230000 to 250000 ug/L	Fresh water Fish - Fathead minnow - Pimephales promelas	- 96hours - 29 to 30 days - 18.2 mm - 0.106 g
Acute LC50 230000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia pulex	- < 1 days
Acute LC50 212500 to 225420 ug/L	Fresh water Fish - Indian catfish - Heteropneustes fossilis	- 96 hours - 14.16 cm - 25.54 g
Acute LC50 175000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia cucullata	- 11 days
Acute LC50 154000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia cucullata	- 11 days
Acute LC50 1600000 ug/L	Fresh water Crustaceans - Aquatic	48 hours
Fresh water	Daphnia magna	- < 1 days
Acute LC50 786000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia magna	- < 1 days
Acute LC50 778000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia magna	- < 1 days
Acute LC50 698000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia magna	- < 1 days
Acute LCC50 660000 ug/L	Fresh water Daphnia - Water flea	- 48 hours
Fresh water	Daphnia magna	- < 1 days

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 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:

Flammable liquid  
Irritating material  
Target organ effects

## Ethyl Acetate

U.S. Federal regulations: TSCA 4[a] final test rules: Ethyl Acetate  
United States inventory (TSCA 8B): This material is listed or exempted.  
TSCA 12 (b) one-time export: Ethyl Acetate  
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 notification: 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: 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 substances: No products were found  
Clean Air Act (CAA) 112 regulated toxic substances: No products were found  
DEA List I Chemicals : Not listed  
(Precursor Chemicals)  
DEA List II Chemicals : Not listed  
(Essential Chemicals)  
Massachusetts Substances : This material not listed  
New Jersey Hazardous : This material not listed  
Substances  
New York Acutely : This material not listed  
Hazardous Substances  
Pennsylvania RTK : This material not listed  
Hazardous Substances.  
Canada  
WHMIS (Canada) : Class B-2: Flammable liquid  
: Class D-2B Material causing other toxic effects (Toxic)  
Canadian lists  
CEPA Toxic substances: This material is not listed.  
Canadian ARET: This material is not listed.  
Canadian NPRI: This material is not 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 : This material is listed or exempted.

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

### SECTION 16

### Additional Information

Ethyl Acetate

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Flammability

Health

Reactivity

**Revisions**

**NFPA**

0.1

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