



# Material Safety Data Sheet

## Section 1. Product and Company Identification

<b>Product Name</b>	Ethyl Acetate, GR	<b>Product Code</b>	EX0240
<b>Manufacturer</b>	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	<b>Effective Date</b>	11/28/2005
		<b>Print Date</b>	12/15/2005

### For More Information Call

856-423-6300 Technical Service  
Monday-Friday: 8:00 AM - 5:00 PM

### In Case of Emergency Call

800-424-9300 CHEMTREC (USA)  
613-996-6666 CANUTEC (Canada)  
24 Hours/Day: 7 Days/Week

**Synonym** ETHYL ETHANOATE

**Material Uses** Analytical reagent.

**Chemical Family** Aliphatic ether.

## Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Ethyl Acetate	141-78-6	100

## Section 3. Hazards Identification

**Physical State and Appearance** Liquid. (Colorless.)

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

**Routes of Entry** Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential Acute Health Effects

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Skin** Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation** Hazardous in case of inhalation (lung irritant). May be hazardous in case of inhalation.

**Ingestion** May be hazardous in case of ingestion.

Continued on Next Page

**Potential Chronic Health Effects**

*Carcinogenic Effects* This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

**Medical Conditions  
Aggravated by  
Overexposure:**

Repeated or prolonged exposure is not known to aggravate medical condition.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Section 5. Fire Fighting Measures**

<b>Flammability of the Product</b>	Product will burn.
<b>Auto-ignition Temperature</b>	425.9°C (798.6°F)
<b>Flash Points</b>	Closed cup: -5.1°C (22.8°F).
<b>Flammable Limits</b>	LOWER: 2% UPPER: 11.5%
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire Hazards in Presence of Various Substances</b>	Highly flammable in presence of open flames, sparks and static discharge, of shocks, of heat, of oxidizing materials.
<b>Explosion Hazards in Presence of Various Substances</b>	<b>Risks of explosion of the product in presence of static discharge:</b> Highly flammable in presence of open flames, sparks and static discharge. Highly explosive in presence of open flames, sparks and static discharge.  <b>Risks of explosion of the product in presence of mechanical impact:</b> Highly flammable in presence of shocks. Highly explosive in presence of shocks.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
<b>Protective Clothing (Fire)</b>	Be sure to use an approved/certified respirator or equivalent.
<b>Special Remarks on Fire Hazards</b>	Vapor may travel considerable distance to source of ignition and flash back.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Continued on Next Page**

**Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
<b>Spill Kit Information</b>	The following EMD Chemicals Inc. SpillSolv ® absorbent is recommended for this product: SX1330 Solvent Treatment Kit

**Section 7. Handling and Storage**

<b>Handling</b>	Keep away from heat, sparks and flame. Keep container closed. Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe gas/fumes/ vapor/spray.
<b>Storage</b>	Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
-----------------------------	---

**Personal Protection**

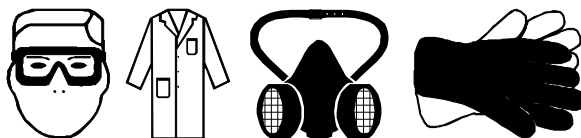
**Eyes** Splash goggles.

**Body** Lab coat.

**Respiratory** Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Hands** Gloves.

**Feet** Not applicable.

**Protective Clothing  
(Pictograms)**

<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
---	---

**Product Name****Exposure Limits**

Ethyl Acetate

**ACGIH (United States, 1996).**

TWA: 1440 mg/m<sup>3</sup> 8 hour(s).

TWA: 400 ppm 8 hour(s).

**NIOSH REL (United States, 1994).**

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

TWA: 400 ppm 10 hour(s).

**OSHA Final Rule (United States, 1989).**

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

TWA: 400 ppm 8 hour(s).

**Section 9. Physical and Chemical Properties**

Odor	Characteristic. Sweetish
Color	Colorless.
Physical State and Appearance	Liquid. (Colorless.)
Molecular Weight	88.12 g/mole
Molecular Formula	C4-H8-O2
pH	Not available.
Boiling/Condensation Point	77.28°C (171.1°F)
Melting/Freezing Point	-83.95°C (-119.1°F)
Critical Temperature	249.9°C (481.8°F)
Specific Gravity	0.902 (Water = 1)
Vapor Pressure	Not available.
Vapor Density	3 (Air = 1)
Odor Threshold	1 ppm
Evaporation Rate	4.94 compared to (n-BUTYL ACETATE=1)
LogK <sub>ow</sub>	Not available.
Solubility	Partially soluble in water.

**Section 10. Stability and Reactivity**

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Highly reactive with oxidizing agents, acids.
Rem/Incompatibility	Not available.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Will not occur.

**Section 11. Toxicological Information**

RTECS Number:	Ethyl Acetate	AH5425000
Toxicity	Acute oral toxicity (LD <sub>50</sub> ): 4100 mg/kg [Mouse].	
Chronic Effects on Humans	Not available.	

**Continued on Next Page**

<b>Acute Effects on Humans</b>	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation (lung irritant). May be hazardous in case of inhalation. May be hazardous in case of ingestion.
<b>Synergetic Products (Toxicologically)</b>	Not available.
<b>Irritancy</b>	<u>Draize Test</u> : Not available.
<b>Sensitization</b>	Not available.
<b>Carcinogenic Effects</b>	This material is not known to cause cancer in animals or humans.
<b>Toxicity to Reproductive System</b>	Not available.
<b>Teratogenic Effects</b>	Not available.
<b>Mutagenic Effects</b>	Tests on laboratory animals for mutagenic effects are cited in Registry of Toxic Effects of Chemical Substances (RTECS).

## Section 12. Ecological Information

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are less toxic than the product itself.

## Section 13. Disposal Considerations

<b>EPA Waste Number</b>	D001 U112
<b>Treatment</b>	Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

## Section 14. Transport Information

<b>DOT Classification</b>	Proper Shipping Name: ETHYL ACETATE Hazard Class: 3 UN number: UN1173 Packing Group: II RQ: 5000 lbs. (2268 kg)
<b>TDG Classification</b>	Not available.
<b>IMO/IMDG Classification</b>	Proper Shipping Name: ETHYL ACETATE Hazard Class: 3 UN number: UN1173 Packing Group: II RQ: 5000
<b>ICAO/IATA Classification</b>	Not available.

**Section 15. Regulatory Information**

U.S. Federal Regulations	TSCA 4(a) final test rules: Ethyl Acetate	
	TSCA 8(b) inventory: Ethyl Acetate	
	TSCA 12(b) one time export: Ethyl Acetate	
	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	
	SARA 313 toxic chemical notification and release reporting: No products were found.	
	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.		
WHMIS (Canada)	CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).	
	Class D-2B: Material causing other toxic effects (TOXIC).	
<hr/>		
CEPA DSL: Ethyl Acetate		
This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.		
<hr/>		
International Regulations		
EINECS	Ethyl Acetate	205-500-4
<hr/>		
DSCL (EEC)	R11- Highly flammable.	
	R37/38- Irritating to respiratory system and skin.	
	R41- Risk of serious damage to eyes.	
<hr/>		
International Lists	Australia (NICNAS): Ethyl Acetate	
	Japan (MITI): Ethyl Acetate	
	Korea (TCCL): Ethyl Acetate	
	Philippines (RA6969): Ethyl Acetate	
	China: No products were found.	
<hr/>		
State Regulations	Pennsylvania RTK: Ethyl Acetate: (environmental hazard, generic environmental hazard)	
	Massachusetts RTK: Ethyl Acetate	
	New Jersey: Ethyl Acetate	
	California prop. 65: No products were found.	

**Section 16. Other Information**

**National Fire  
Protection  
Association  
(U.S.A.)**



**Changed Since Last  
Revision**



**Notice to Reader**

**Continued on Next Page**

*The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.*