



Fisher Scientific

Part of Thermo Fisher Scientific

Material Safety Data Sheet

Creation Date 13-Oct-2009

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Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Ethyl acetate
Cat No.	BP1125-1; BP1125-4; E124-4; E124-20; E124RS-200; E145-1; E145-4; E145-4LC; E145-20; E145-200; E145-500; E145FB-19; E145FB-50; E145FB-115; E145FB-200; E145POP-50; E145POPB-50; E145RB-19; E145RB-50; E145RB-115; E145RB-200; E145RS-28; E145RS-50; E145RS-115; E145S-4; E145SK-4; E145SK-4LC; E145SS-28; E145SS-50; E145SS-115; E145SS-200; E145SS-1350; E189-4; E191-4; E195-4; E195N1-19; E195N2-19; E195RS-50; E195RS-115; E195RS-200; E195SK-1; E195SK-4; E195SS-19; E195SS-50; E195SS-115; E196-4; E196-4LC; E196RS-28; E196RS-115; E196SK-4; E196SS-28; E196SS-50; E196SS-115; E196SS-200
Synonyms	Acetic acid ethyl ester (Sequencing/NF/Certified ACS/Spectranalyzed/Pesticide/HPLC/Optima)
Recommended Use	Laboratory chemicals
Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 703-527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable liquid and vapor. Irritating to eyes. May cause central nervous system effects. May cause skin and respiratory tract irritation. Repeated exposure may cause skin dryness or cracking.

Appearance Colorless

Physical State Liquid

odor sweet

Target Organs

Skin, Respiratory system, Eyes, Central nervous system (CNS), Blood, Liver

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes	Irritating to eyes.
Skin	May cause irritation. May be harmful in contact with skin. Repeated exposure may cause skin dryness or cracking.
Inhalation	Inhalation may cause central nervous system effects. May cause irritation of respiratory tract. May be harmful if inhaled.
Ingestion	May be harmful if swallowed. May cause central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects Repeated exposure may cause skin dryness or cracking. May cause adverse liver effects.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Preexisting eye disorders. Skin disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Ethylacetate	141-78-6	>95

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Obtain medical attention.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	-4°C / 24.8°F
Method	No information available.
Autoignition Temperature	427°C / 800.6°F
Explosion Limits	
Upper	11.5 vol %
Lower	2.0 vol %
Suitable Extinguishing Media	CO ₂ , dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire with water spray.
Unsuitable Extinguishing Media	Water may be ineffective
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA**Health 1****Flammability 3****Instability 0****Physical hazards N/A****6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE**Handling**

Use only under a chemical fume hood. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Flammables area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering Measures**

Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylacetate	TWA: 400 ppm	(Vacated) TWA: 400 ppm (Vacated) TWA: 1400 mg/m ³ TWA: 400 ppm TWA: 1400 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m ³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Ethylacetate	TWA: 1440 mg/m ³ TWA: 400 ppm	TWA: 1400 mg/m ³ TWA: 400 ppm	TWA: 1440 mg/m ³ TWA: 400 ppm

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Colorless
odor	sweet
Odor Threshold	No information available.
pH	No information available.
Vapor Pressure	103 mbar @ 20°C
Vapor Density	3.04 (Air = 1.0)
Viscosity	0.45 cP @ 20 °C
Boiling Point/Range	75 - 78°C / 167 - 171.5°F
Melting Point/Range	-83.5°C / -118.3°F
Decomposition temperature	No information available.
Flash Point	-4°C / 24.8°F
Evaporation Rate	(Butyl Acetate = 1.0)
Specific Gravity	0.902
Solubility	Slightly soluble in water
log Pow	No data available
Molecular Weight	88.11
Molecular Formula	C4 H8 O2

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Heat, flames and sparks. Exposure to moist air or water. Exposure to light. Exposure to air.
Incompatible Materials	Strong oxidizing agents, Strong acids, Strong bases
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

See actual entry in RTECS for complete information.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylacetate	5620 mg/kg (Rat)	18000 mg/kg (Rabbit) 20 mL/kg (Rabbit)	Not listed

Irritation Irritating to eyes

Toxicologically Synergistic Products No information available.

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.

Mutagenic Effects Mutagenic effects have occurred in experimental animals.

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

Other Adverse Effects See actual entry in RTECS for complete information.

Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethylacetate	EC50 = 3300 mg/L/48h	Gold orfe: LC50: 270 mg/L/48h	EC50 = 1180 mg/L 5 min EC50 = 1500 mg/L 15 min EC50 = 5870 mg/L 15 min EC50 = 7400 mg/L 2 h	EC50 = 717 mg/L/48h

Persistence and Degradability Readily biodegradable.

Bioaccumulation/ Accumulation No information available

Mobility

Component	log Pow
Ethylacetate	0.6

13. DISPOSAL CONSIDERATIONS

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Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Ethylacetate - 141-78-6	U112	-

14. TRANSPORT INFORMATION

DOT

UN-No UN1173
 Proper Shipping Name ETHYL ACETATE
 Hazard Class 3
 Packing Group II

TDG

UN-No UN1173
 Proper Shipping Name ETHYL ACETATE
 Hazard Class 3
 Packing Group II

IATA

UN-No UN1173
 Proper Shipping Name ETHYL ACETATE
 Hazard Class 3
 Packing Group II

IMDG/IMO

UN-No UN1173
 Proper Shipping Name ETHYL ACETATE
 Hazard Class 3
 Packing Group II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Ethylacetate	T	X	-	205-500-4	-		X	X	X	X	KE-00047 X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
 N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
 P - Indicates a commenced PMN substance
 R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
 S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
 T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
 XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).
 Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
 Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313
 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
 Not applicable

Clean Air Act
 Not applicable

OSHA
 Not applicable

CERCLA
 This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Ethylacetate	5000 lb	-

California Proposition 65
 This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethylacetate	X	X	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ):	Y
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Serious risk, Grade 3

Canada

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

WHMIS Hazard Class

B2 Flammable liquid

**16. OTHER INFORMATION**

Prepared By	Regulatory Affairs Thermo Fisher Scientific Tel: (412) 490-8929
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Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS