

Creation Date Oct-2013

Revision Date Oct-2018

Revision Number 2

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identification

<b>Product Description:</b>	<b>Ethyl acetate</b>
<b>Product Grade:</b>	SQ, ER, HPLC
<b>Cat No. :</b>	Q43536, Q23457, Q2345C, Q12645, Q12647, Q1264C, Q23455, Q23456, Q2345H
<b>Synonyms</b>	Acetic acid ethyl ester
<b>CAS-No</b>	141-78-6
<b>EC-No.</b>	205-500-4
<b>Molecular Formula</b>	C4 H8 O2
<b>Reach Registration Number</b>	01-2119475103-46

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<b>Recommended Use</b>	Laboratory chemicals.
<b>Sector of use</b>	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
<b>Product category</b>	PC21 - Laboratory chemicals
<b>Process categories</b>	PROC15 - Use as a laboratory reagent
<b>Environmental release category</b>	ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
<b>Uses advised against</b>	No Information available

### 1.3. Details of the supplier of the safety data sheet

<b>Company</b>	Thermo Fisher Scientific India Pvt. Ltd 403-404, B-wing, Delphi, Hiranandani Business Park, Powai, Mumbai 400076, INDIA.
<b>E-mail address</b>	<a href="mailto:laboratorysolutions@thermofisher.com">laboratorysolutions@thermofisher.com</a>

### 1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30  
Chemtrec US: (800)424-9300  
Chemtrec EU: 001(202)483-7616

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### CLP Classification - Regulation (EC) No 1272/2008

#### Physical hazards

Flammable liquids	Category 2 (H225)
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#### Health hazards

Serious Eye Damage/Eye Irritation	Category 2 (H319)
Specific target organ toxicity - (single exposure)	Category 3 (H336)

#### Environmental hazards

Based on available data, the classification criteria are not met

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## 2.2. Label elements



Signal Word

Danger

### Hazard Statements

- H225 - Highly flammable liquid and vapor
- H319 - Causes serious eye irritation
- H336 - May cause drowsiness or dizziness
- EUH066 - Repeated exposure may cause skin dryness or cracking

### Precautionary Statements

- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P240 - Ground/bond container and receiving equipment
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

## 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Ethyl acetate	141-78-6	EEC No. 205-500-4	>95	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336) EUH066

Reach Registration Number	01-2119475103-46
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Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General Advice</b>	If symptoms persist, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

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**Inhalation** Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**Protection of First-aiders** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Breathing difficulties. May cause central nervous system depression: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

#### **4.3. Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically. Symptoms may be delayed.

## **SECTION 5: FIREFIGHTING MEASURES**

#### **5.1. Extinguishing media**

##### **Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### **Extinguishing media which must not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire.

#### **5.2. Special hazards arising from the substance or mixture**

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.

##### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

#### **5.3. Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Ensure adequate ventilation.

#### **6.2. Environmental precautions**

Should not be released into the environment. See Section 12 for additional ecological information.

#### **6.3. Methods and material for containment and cleaning up**

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

#### **6.4. Reference to other sections**

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### **7.1. Precautions for safe handling**

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Ensure adequate ventilation. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

## 7.2. Conditions for safe storage, including any incompatibilities

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

## 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

List source(s): **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement. **IRE** - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component	European Union	The United Kingdom	France	Belgium	Spain
Ethyl acetate		STEL: 400 ppm 15 min TWA: 200 ppm 8 hr	TWA / VME: 400 ppm (8 heures). TWA / VME: 1400 mg/m <sup>3</sup> (8 heures).	TWA: 400 ppm 8 uren TWA: 1461 mg/m <sup>3</sup> 8 uren	TWA / VLA-ED: 400 ppm (8 horas) TWA / VLA-ED: 1460 mg/m <sup>3</sup> (8 horas)
Component	Italy	Germany	Portugal	The Netherlands	Finland
Ethyl acetate		TWA: 400 ppm (8 Stunden). AGW - exposure factor 2 TWA: 1500 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2 TWA: 400 ppm (8 Stunden). MAK TWA: 1500 mg/m <sup>3</sup> (8 Stunden). MAK Höhepunkt: 800 ppm Höhepunkt: 3000 mg/m <sup>3</sup>	TWA: 400 ppm 8 horas		TWA: 300 ppm 8 tunteina TWA: 1100 mg/m <sup>3</sup> 8 tunteina STEL: 500 ppm 15 minuutteina STEL: 1800 mg/m <sup>3</sup> 15 minuutteina
Component	Austria	Denmark	Switzerland	Poland	Norway
Ethyl acetate	MAK-KZW: 600 ppm 15 Minuten MAK-KZW: 2100 mg/m <sup>3</sup> 15 Minuten MAK-TMW: 300 ppm 8 Stunden MAK-TMW: 1050 mg/m <sup>3</sup> 8 Stunden	TWA: 150 ppm 8 timer TWA: 540 mg/m <sup>3</sup> 8 timer	STEL: 800 ppm 15 Minuten STEL: 2800 mg/m <sup>3</sup> 15 Minuten TWA: 400 ppm 8 Stunden TWA: 1400 mg/m <sup>3</sup> 8 Stunden	STEL: 1468 mg/m <sup>3</sup> 15 minutach TWA: 734 mg/m <sup>3</sup> 8 godzinach	TWA: 150 ppm 8 timer TWA: 550 mg/m <sup>3</sup> 8 timer STEL: 150 ppm 15 minutter. STEL: 550 mg/m <sup>3</sup> 15 minutter.
Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Ethyl acetate	TWA: 800 mg/m <sup>3</sup>	TWA-GVI: 200 ppm 8 satima. STEL-KGVI: 400 ppm 15 minutama.	TWA: 200 ppm 8 hr. STEL: 400 ppm 15 min		TWA: 700 mg/m <sup>3</sup> 8 hodinách. Ceiling: 900 mg/m <sup>3</sup>
Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Ethyl acetate	TWA: 150 ppm 8		TWA: 400 ppm	STEL: 1400 mg/m <sup>3</sup> 15	TWA: 150 ppm 8

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	tundides. TWA: 500 mg/m <sup>3</sup> 8 tundides. STEL: 300 ppm 15 minutites. STEL: 1100 mg/m <sup>3</sup> 15 minutites.		TWA: 1400 mg/m <sup>3</sup>	percekben. CK TWA: 1400 mg/m <sup>3</sup> 8 óraban. AK	klukkustundum. TWA: 540 mg/m <sup>3</sup> 8 klukkustundum. Ceiling: 300 ppm Ceiling: 1080 mg/m <sup>3</sup>
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Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Ethyl acetate	TWA: 200 mg/m <sup>3</sup>	Ceiling: 300 ppm Ceiling: 1100 mg/m <sup>3</sup> TWA: 150 ppm IPRD TWA: 500 mg/m <sup>3</sup> IPRD			TWA: 111 ppm 8 ore TWA: 400 mg/m <sup>3</sup> 8 ore STEL: 139 ppm 15 minute STEL: 500 mg/m <sup>3</sup> 15 minute

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Ethyl acetate	TWA: 50 mg/m <sup>3</sup> STEL: 200 mg/m <sup>3</sup> vapor	Ceiling: 1100 mg/m <sup>3</sup> TWA: 400 ppm TWA: 1500 mg/m <sup>3</sup>	TWA: 400 ppm 8 urah TWA: 1400 mg/m <sup>3</sup> 8 urah STEL: 400 ppm 15 minutah STEL: 1400 mg/m <sup>3</sup> 15 minutah	STV: 300 ppm 15 minuter STV: 1100 mg/m <sup>3</sup> 15 minuter LLV: 150 ppm 8 timmar. LLV: 500 mg/m <sup>3</sup> 8 timmar.	

### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS70 General methods for sampling airborne gases and vapours

MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography

MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

**Derived No Effect Level (DNEL)** See table for values

<u>Route of exposure</u>	<b>Acute effects (local)</b>	<b>Acute effects (systemic)</b>	<b>Chronic effects (local)</b>	<b>Chronic effects (systemic)</b>
<b>Oral</b>				
<b>Dermal</b>				63 mg/kg bw/d
<b>Inhalation</b>	1468 mg/m <sup>3</sup> 400 ppm	1468 mg/m <sup>3</sup> 400 ppm	734 mg/m <sup>3</sup> 200 ppm	734 mg/m <sup>3</sup> 200 ppm

**Predicted No Effect Concentration (PNEC)** See values below.

<b>Fresh water</b>	0.26 mg/l
<b>Fresh water sediment</b>	0.34 mg/kg
<b>Marine water</b>	0.026 mg/l
<b>Marine water sediment</b>	0.034 mg/kg
<b>Microorganisms in sewage treatment</b>	650 mg/l
<b>Soil (Agriculture)</b>	0.22 mg/kg dw

### 8.2. Exposure controls

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## Engineering Measures

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.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)  
**Hand Protection** Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	> 120 minutes	0.5 - 0.7 mm	EN 374 Level 4	Permeation rate 8 µg/cm <sup>2</sup> /min As tested under EN374-3 Determination of Resistance to Permeation by Chemicals
Nitrile rubber	< 200 minutes			
PVA	> 360 minutes	0.3 mm		
Nitrile rubber	< 30 minutes	0.38 mm		

**Skin and body protection** Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Large scale/emergency use** Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Small scale/Laboratory use** Maintain adequate ventilation

**Environmental exposure controls** No information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Colorless	
<b>Physical State</b>	Liquid	
<b>Odor</b>	sweet	
<b>Odor Threshold</b>	50 ppm	
<b>pH</b>	No information available	
<b>Melting Point/Range</b>	-83.5 °C / -118.3 °F	
<b>Softening Point</b>	No data available	
<b>Boiling Point/Range</b>	75 - 78 °C / 167 - 172.4 °F	
<b>Flash Point</b>	-4 °C / 24.8 °F	
<b>Evaporation Rate</b>	6.2	<b>Method</b> - Closed cup (Butyl Acetate = 1.0)
<b>Flammability (solid,gas)</b>	Not applicable	Liquid
<b>Explosion Limits</b>	<b>Lower</b> 2 Vol% <b>Upper</b> 12 Vol%	
<b>Vapor Pressure</b>	103 mbar @ 20°C	
<b>Vapor Density</b>	3.04	(Air = 1.0)
<b>Specific Gravity / Density</b>	0.902	@ 20 °C
<b>Bulk Density</b>	Not applicable	Liquid
<b>Water Solubility</b>	80 g/l	20 °C
<b>Solubility in other solvents</b>	Miscible Alcohol acetone	

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## Partition Coefficient (n-octanol/water)

<b>Component</b>	<b>log Pow</b>	
Ethyl acetate	0.6	
<b>Autoignition Temperature</b>	427 °C / 800.6 °F	
<b>Decomposition Temperature</b>	No data available	
<b>Viscosity</b>	0.45 cP @ 20 °C	Dynamic
<b>Explosive Properties</b>	Not explosive	Vapors may form explosive mixtures with air
<b>Oxidizing Properties</b>	Not oxidising	(based on the chemical structure of the substance and oxidation states of the constituent elements)

## 9.2. Other information

<b>Molecular Formula</b>	C4 H8 O2
<b>Molecular Weight</b>	88.11
<b>Surface tension</b>	24 mN/m @ 20°C

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions** None under normal processing.

### 10.4. Conditions to avoid

Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Amines. Peroxides.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Product Information

#### (a) acute toxicity;

<b>Oral</b>	Based on available data, the classification criteria are not met
<b>Dermal</b>	Based on available data, the classification criteria are not met
<b>Inhalation</b>	Based on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl acetate	10,200 mg/kg ( Rat )	> 20 mL/kg ( Rabbit ) > 18000 mg/kg ( Rabbit )	58 mg/l (rat; 8 h)

#### (b) skin corrosion/irritation;

<b>Test method</b>	Based on available data, the classification criteria are not met OECD Test Guideline 404
<b>Test species</b>	rabbit
<b>Observational endpoint</b>	No skin irritation

#### (c) serious eye damage/irritation;

<b>Test method</b>	Category 2 OECD Test Guideline 405
<b>Test species</b>	rabbit eye

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**Observation end point** Irritating to eyes

**(d) respiratory or skin sensitization;**

**Respiratory**

Based on available data, the classification criteria are not met

**Skin**

Based on available data, the classification criteria are not met

Component	Test method	Test species	Study result
Ethyl acetate 141-78-6 (>95)	OECD Test Guideline 406	guinea pig	- non-sensitising

**(e) germ cell mutagenicity;**

Based on available data, the classification criteria are not met

Component	Test method	Test species	Study result
Ethyl acetate 141-78-6 (>95)	OECD Test Guideline 471 AMES test	in vitro Bacteria	negative
	OECD Test Guideline 473 Chromosomal aberration assay	in vitro Mammalian	negative
	OECD Test Guideline 476 Gene cell mutation	in vitro Mammalian	negative
	OECD Test Guideline 474 Mouse micronucleus assay	in vivo Mammalian	negative

**(f) carcinogenicity;**

Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;**

Based on available data, the classification criteria are not met

Component	Test method	Test species / Duration	Study result
Ethyl acetate 141-78-6 (>95)	OECD Test Guideline 416	Oral mouse 2 Generation	NOAEL = 26400 mg/kg bw/day NOAEC = 73300 mg/m <sup>3</sup>
	OECD Test Guideline 414	Inhalation rat	

**(h) STOT-single exposure;**

Category 3

**Results / Target organs**

Central nervous system (CNS).

**(i) STOT-repeated exposure;**

Based on available data, the classification criteria are not met

**Test method**

EPA OTS 795.2600

EPA OTS 798.2450

**Test species / Duration**

rat / 90 days

rat / 90 days

**Study result**

NOAEL = 900 mg/kg bw/day

NOEC = 1.28 mg/l

**Route of exposure**

Oral

Inhalation

**Target Organs**

None known.

**(j) aspiration hazard;**

Based on available data, the classification criteria are not met

**Symptoms / effects, both acute and delayed**

May cause central nervous system depression: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

**Ecotoxicity effects**

Do not empty into drains.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Ethyl acetate	Fathead minnow: LC50: 230 mg/l/ 96h Gold orfe: LC50: 270 mg/L/48h	EC50 = 717 mg/L/48h	EC50 = 3300 mg/L/48h	EC50 = 1180 mg/L 5 min EC50 = 1500 mg/L 15 min EC50 = 5870 mg/L 15 min



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				min EC50 = 7400 mg/L 2 h
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**12.2. Persistence and degradability** Readily biodegradable  
**Persistence** Persistence is unlikely, based on information available.

Component	Degradability
Ethyl acetate 141-78-6 ( >95 )	79 % (20 d) (OECD 301 D)

**12.3. Bioaccumulative potential** Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Ethyl acetate	0.6	30

## **12.4. Mobility in soil**

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air

**Surface tension**

24 mN/m @ 20°C

## **12.5. Results of PBT and vPvB assessment**

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

## **12.6. Other adverse effects**

**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**Persistent Organic Pollutant**

This product does not contain any known or suspected substance

**Ozone Depletion Potential**

This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### **13.1. Waste treatment methods**

**Waste from Residues / Unused Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging**

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

**European Waste Catalogue (EWC)**

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

**Other Information**

Waste codes should be assigned by the user based on the application for which the product was used. Do not dispose of waste into sewer. Can be incinerated, when in compliance with local regulations.

## SECTION 14: TRANSPORT INFORMATION

### **IMDG/IMO**

**14.1. UN number** UN1173  
**14.2. UN proper shipping name** ETHYL ACETATE  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

### **ADR**

**14.1. UN number** UN1173  
**14.2. UN proper shipping name** ETHYL ACETATE  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

### **IATA**

**14.1. UN number** UN1173

FSUE0900

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<b>14.2. UN proper shipping name</b>	ETHYL ACETATE
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	No hazards identified
<b>14.6. Special precautions for user</b>	No special precautions required
<b>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Ethyl acetate	205-500-4	-		X	X	-	X	X	X	X	X

### National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Ethyl acetate	WGK 1	

Component	France - INRS (Tables of occupational diseases)
Ethyl acetate	Tableaux des maladies professionnelles (TMP) - RG 84

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapor

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

EUH066 - Repeated exposure may cause skin dryness or cracking

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**PNEC** - Predicted No Effect Concentration

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

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**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - Volatile Organic Compounds

## Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Chemical incident response training.

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**Next Revision Date** Oct-2023

**Revision Summary** SDS section 1 updated and update of Format

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

## Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of Safety Data Sheet**