

**Ethyl acetate****494518-1L**

Version 1.5

Issuing date

Revision Date 11/27/2017

Print Date 08/07/2019

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Ethyl acetate

Number : 000000020226

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH  
Wunstorfer Straße 40  
Seelze, 30926

For further information, please contact: : 1-800-368-0050  
+1-231-726-3171  
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**  
: **In Japan: +(81)-345209637**  
: (24 hours/day, 7 days/week)

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

Classification of the substance or mixture : Flammable liquids, Category 2  
Eye irritation, Category 2A  
Specific target organ toxicity - single exposure, Category 3

**GHS Label elements, including precautionary statements**

Symbol(s)



Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapour.  
Causes serious eye irritation.  
May cause drowsiness and dizziness.

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## Precautionary statements

: **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

If eye irritation persists: Get medical advice/ attention.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Ethyl acetate	141-78-6	100.00 %
Ethyl acetate		

**4. FIRST AID MEASURES**

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Inhalation	: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.
Skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician if irritation develops or persists.
Eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.
Ingestion	: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is fully conscious, give a cupful of water. Call a physician.
Notes to physician	: Treat symptomatically.

**5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Alcohol-resistant foam Dry chemical Carbon dioxide (CO <sub>2</sub> ) Cool closed containers exposed to fire with water spray.
Specific hazards during firefighting	: Flammable. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide Carbon dioxide (CO <sub>2</sub> )
Special protective equipment for firefighters	: Wear self-contained breathing apparatus and protective suit.
Further information	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**6. ACCIDENTAL RELEASE MEASURES**

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Personal precautions,  
protective equipment and  
emergency procedures

: Wear personal protective equipment.  
Immediately evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Do not swallow.  
Avoid breathing vapours, mist or gas.  
Avoid contact with skin, eyes and clothing.

Environmental precautions

: Prevent further leakage or spillage if safe to do so.  
Prevent product from entering drains.  
Discharge into the environment must be avoided.  
Do not flush into surface water or sanitary sewer system.  
Do not allow run-off from fire fighting to enter drains or water courses.

Methods and materials for  
containment and cleaning up

: Ventilate the area.  
No sparking tools should be used.  
Use explosion-proof equipment.  
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**7. HANDLING AND STORAGE****Handling**

Precautions for safe handling

: Wear personal protective equipment.  
Use only in well-ventilated areas.  
Keep container tightly closed.  
Do not smoke.  
Do not swallow.  
Avoid breathing vapours, mist or gas.  
Avoid contact with skin, eyes and clothing.

Advice on protection against  
fire and explosion

: Keep away from fire, sparks and heated surfaces.  
Take precautionary measures against static discharges.  
Ensure all equipment is electrically grounded before beginning transfer operations.  
Use explosion-proof equipment.  
Keep product and empty container away from heat and sources of ignition.  
No sparking tools should be used.  
No smoking.

**Storage**

Conditions for safe storage,  
including any

: Store in area designed for storage of flammable liquids.  
Protect from physical damage.

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## incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Keep away from heat and sources of ignition.  
 Keep away from direct sunlight.  
 Store away from incompatible substances.  
 Container hazardous when empty.  
 Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Ethyl acetate Ethyl acetate	141-78-6	TL : Threshold limits	(200 ppm)	08 2006	ISHL:Industrial Safety and Health Law OEL
		TWA : Time weighted average	720 mg/m3 (200 ppm)	04 2007	Japan Society for Occupational Health:Japan Society for Occupational Health allowable concentration recommendation value

## Appropriate engineering controls

Use with local exhaust ventilation.  
 Prevent vapour buildup by providing adequate ventilation during and after use.

## Individual protection measures, such as personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.  
 For rescue and maintenance work in storage tanks use self-contained breathing apparatus.  
 Use NIOSH approved respiratory protection.

Hand protection : Solvent-resistant gloves  
 Gloves must be inspected prior to use.

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	Replace when worn.
Eye protection	: Do not wear contact lenses. Wear as appropriate: Safety glasses with side-shields If splashes are likely to occur, wear: Goggles or face shield, giving complete protection to eyes
Skin and body protection	: Wear as appropriate: Solvent-resistant apron Flame retardant antistatic protective clothing. If splashes are likely to occur, wear: Protective suit
Hygiene measures	: When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Keep working clothes separately. Remove and wash contaminated clothing before re-use. Do not swallow. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing.
Protective measures	: Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: liquid
Colour	: colourless
Odour	: like fruit
pH	: Note: no data available
Melting point/range	: -84 °C
Boiling point/boiling range	: 77 °C at 1,013 hPa
Flash point	: 25 °F (-4 °C) Method: closed cup
Evaporation rate	: ca. 5

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Lower explosion limit	: 2.1 %(V)
Upper explosion limit	: 11.5 %(V)
Vapour pressure	: 97 hPa at 20 °C(68 °F)
Vapour density	: ca. 3 Note: (Air = 1.0)
Density	: 0.901 g/cm <sup>3</sup>
Water solubility	: ca. 90 g/l
Solubility in other solvents	: Note: Soluble in most organic solvents
Ignition temperature	: 426 °C
Viscosity, kinematic	: Note: not determined
Molecular weight	: 88.11 g/mol

**10. STABILITY AND REACTIVITY**

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Heat, flames and sparks. Keep away from direct sunlight.
Incompatible materials to avoid	: Strong oxidizing agents Acids Bases  Oxidizing solids Oxidizing liquids

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Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : LD50: 4,934 mg/kg  
Species: Rabbit  
Method: OECD Test Guideline 401

: LD50: 10,200 mg/kg  
Species: Rat, female

Acute inhalation toxicity : LC0: > 22.5 mg/l > 6000 ppm  
Exposure time: 6 h  
Species: Rat  
Note: No deaths

Acute dermal toxicity : LD50: > 18,000 mg/kg  
Species: Rabbit

Skin irritation : Species: Rabbit  
Result: slight irritation  
Method: OECD Test Guideline 404

Eye irritation : Species: Rabbit  
Result: slight irritation  
Method: OECD Test Guideline 405

**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish : LC50: 230 mg/l  
Exposure time: 96 h  
Species: Salmo gairdneri

Toxicity to algae : EC50: 3,300 mg/l



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Exposure time: 48 h  
Species: *scenedesmus subspicatus*

: Growth inhibition  
NOEC: > 100 mg/l  
Exposure time: 72 h  
Species: Algae

**Persistence and degradability****Bioaccumulative potential**

Bioaccumulation : Note: Bioaccumulation is unlikely.

Biochemical Oxygen Demand (BOD) : Value: 293 mg/g  
Chemical Oxygen Demand (COD) : Value: 1,816 mg/g

**13. DISPOSAL CONSIDERATIONS**

WDPCL Waste Disposal and Public Cleansing Law : Specially Controlled Industrial Waste  
Disposal methods : In accordance with local and national regulations.

**14. TRANSPORT INFORMATION****ADR**

UN/ID No. : UN 1173  
Description of the goods : ETHYL ACETATE  
Class : 3  
Packing group : II  
Classification Code : F1  
Hazard Identification Number : 33  
Labels : 3

**IATA**

UN/ID No. : UN 1173  
Description of the goods : Ethyl acetate  
Class : 3  
Packing group : II  
Labels : 3

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Packing instruction (cargo aircraft) : 364

Packing instruction (passenger aircraft) : 353

Packing instruction (passenger aircraft) : Y341

**IMDG**

UN/ID No. : UN 1173

Description of the goods : ETHYL ACETATE

Class : 3

Packing group : II

Labels : 3

EmS Number 1 : F-E

EmS Number 2 : S-D

Marine pollutant : no

**15. REGULATORY INFORMATION****National regulatory information**

Vessel Safety Law : Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)  
JP VSL

Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)  
JP AVL

Substances Subject to be :  
Notified Names : Threshold Concentration: 1 % wt 177  
JP MSDSD

Substances Subject to be : Article 18  
Indicated Names : Threshold limits: 1 % wt 9.9  
JPISHL LR

Fire Service Law : Group 4 Flammable liquids  
Type 1 petroleums  
Hazardous rank II  
Water insoluble  
Keep away from fire

Poisonous and Deleterious : Deleterious substance not for pharmaceutical use  
Substances Control Law : 30.3  
Listed  
Ethyl acetate 141-78-6

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**Other international regulations****Notification status**

US. Toxic Substances  
Control Act : On TSCA Inventory

Australia. Industrial Chemical  
(Notification and  
Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian  
Environmental Protection Act  
(CEPA). Domestic  
Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals  
Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. The Toxic  
Substances and Hazardous  
and Nuclear Waste Control  
Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing  
Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of  
Chemicals (NZIoC), as  
published by ERMA New  
Zealand : On the inventory, or in compliance with the inventory

**16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 2*	1
Flammability	: 3	3
Physical Hazard	: 0	
Instability	:	0

\* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

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**Further information**

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group