

Updated on: May 2022

SCC Sipchem Chemicals Company

Safety Data Sheet

According to Regulation (EC) No. 1272/2008, Regulation (EC) 1907/2006

1. Identification of the substance/mixture and of the responsible company

1.1. Product Identifier: Ethyl Acetate (C4H8O2)

ACETIC ACID ETHYL ESTER; ACETIC ETHER; ACETIDIN; ACETOXYETHANE; ETHYL ETHANOATE; VINEGAR NAPHTHA; ACETIC ESTER; ETHYL ACETIC ESTER; ETHYL ACETATE, ANHYDROUS; ETHYL ACETATE ESTER; RCRA U112; UN 1173; C4H8O2

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

Identified uses: Industrial solvent, solvent for coatings, films, perfumes and synthetic flavoring agents, extraction solvent for various products and laboratory procedures.

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

Sipchem Chemicals Company (SCC) PO Box 12021
Post Coe 31961 Jubail Industrial City
Kingdom of Saudi Arabia
Website: www.sipchem.com/en/affiliates.htm

1.4. Emergency telephone number: +966 13 359 9985 (24 hours)

2. Hazards Identification

Ethyl Acetate CAS 141-78-6 Purity: >99.5%

Trace Impurities: Ethanol

2.1. Classification of the substance or mixture:

Classification of Labeling in accordance with the CLP Regulations:

Index No	International Chemical Identification	EC No	CAS No	Classification		Labeling			Specific Conc. Limits, M-factors	Notes
				Hazard Class and Category Code(s)	Hazard statement Code(s)	Pictogram Signal Word Code(s)	Hazard Statement Code(s)	Suppl. Hazard statement Code(s)		
607-022-00-5	Ethyl Acetate	205-500-4	141-78-6	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	F Xi; R:11-36-66-67	GHS02 GHS07	H225 H319 H336	EUH066	100	

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Classification according to Regulation 1272/2008/EC (CLP)

Basis for Classification This substance is classified based on Directive 1272/2008/EC and its amendments (CLP Regulation,GHS)

ETHYL ACETATE (141-78-6)

Symbol(s):



Signal Word: Danger

Hazard(s):

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

Prevention:

P233: Keep container tightly closed.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240: Ground/Bond container and receiving equipment.

P241: Use explosion-proof-electrical/ventilating/lighting/.../equipment P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

Response:

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378: In case of fire: Use ... for extinction.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up. Disposal:

P501: Dispose of contents/container to ... Supplemental:

EUH066: Repeated exposure may cause skin dryness or cracking.

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SAFETY DATA SHEET

Emergency overview: DANGER! Highly flammable. Irritating to eyes. Vapors may cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking. May cause central nervous system effects. May cause skin and respiratory tract irritation. May be harmful by inhalation, in contact with skin and if swallowed. Ethyl acetate is a colorless liquid with a sweet odor.

Potential chronic health effects:

CARCINOGENIC EFFECTS: No reported carcinogenic effects; low carcinogenicity potential.
MUTAGENIC EFFECTS: No assigned mutagenic effect classification.
REPRODUCTION TOXICITY: No mammalian developmental/reproductive effects reported.

2.2. Label: See table above.

2.3. Other hazards: None known.

3. Composition/information on ingredients

Formula	CH ₃ COOC ₂ H ₅
CAS-No.	141-78-6
Index-No.	607-022-00-5
EC-No.	200-500-4
Mol Wt.	88.11 g/mol

4. First Aid Measures

4.1. Description of first aid measures

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Wash out mouth and water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed:

Irritant effects, drowsiness, dizziness, narcosis, nausea, headache, vision impairment. Drying and defatting of skin.

4.3. Indication of immediate medical attention and special treatment needed:

No additional information available.

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5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use dry chemical, CO₂, water spray (fog) or foam

Unsuitable extinguishing media: None noted.

5.2. Special hazards arising from the substance or mixture:

Flammable. In a fire or if heated, a pressure increase will occur and the container may burst, with risk of subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

5.3. Advice for fire fighters:

Special protective equipment for fire fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Further information: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving a personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Do not allow fire extinguishing water to contaminate surface or groundwater systems.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Evacuate the danger zone; follow emergency precautions. Secure emergency assistance immediately. Avoid contact with the material; do not breath vapors or aerosol. If possible, provide additional ventilation.

Advice for emergency responders: Do not take action without proper training and emergency equipment. See Section 8 for additional information. Evacuate surrounding areas. Eliminate all ignition sources including flares and all open flames. Avoid all contact with spiller material. Maintain adequate ventilation and wear appropriate respiratory protection.

6.2. 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).

6.3. Methods and materials for containment:

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, surface waters, basements or confined areas. Wash spillage into effluent treatment plant. Contain and collect spillage using appropriate personal protective equipment. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products or if a risk assessment indicates this is necessary. Collect and contain spillage with non-combustible, absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth) and place in a container for disposal according to local regulations. Use spark-proof tools and explosion proof equipment. Contaminated absorbent material may pose the same hazard(s) as the spilled product.

6.4. Reference to other sections:

See disposal instruction 13 and exposure controls Section 8.

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7. Handling and storage

7.1. Precautions for safe handling:

Observe all label precautions. Use appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on protection against fire and explosion: Keep away from flames and sources of ignition – including static.

7.2. Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3. Specific end uses:

No other additional special end uses are anticipated.

8. Exposure controls/personal protection

8.1. Control parameters:

Personal, workplace or environmental monitoring may be necessary to ensure exposures are below recommended and legal limits.

Exposure Limits

ETHYL ACETATE (141-78-6)

ACGIH: 400 ppm TWA

NIOSH: 400 ppm TWA; 1400 mg/m³ TWA

2000 ppm IDLH (10% LEL)

OSHA (US): 400 ppm TWA; 1400 mg/m³ TWA

Mexico: 400 ppm TWA LMPE-PPT; 1400 mg/m³ TWA LMPE-PPT

EU: 400 ppm; 1500 mg/m³

Exposure Limits for Chemicals which may be generated during processing

This material has no components listed.

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8.2. Exposure controls:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Engineering measures: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures:

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. Discard contaminated clothing or wash thoroughly before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: 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 or dusts.

Hand protection: 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 required.

Glove material: butyl or nitrile rubber Glove thickness: 0.7 mm or thicker Break through time: > 240 minutes

Other protective equipment: Flame retardant antistatic protective clothing

Respiratory protection: A properly fitted air purifying respirator or air supply respirator should be worn if a risk assessment indicates that respiratory protection is necessary. Respirator selection must be based upon known or measured levels of exposure.

Environmental exposure controls: Ventilation and engineering controls to protect workers and ventilate work area to at or below recommended employee exposure levels. Technical measures are preferred over use of personal protective equipment. Environmental controls, such as scrubber or thermal oxidizer may be required to prevent process releases to the atmosphere. Do not empty into drains—risk of explosion.

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9. Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Physical State: Liquid	Appearance: clear
Color: colorless	Physical Form: volatile liquid
Odor: varying odor	Odor Threshold: 50 ppm
pH: neutral	Melting Point: -84 °C
Boiling Point: 77 °C	Evaporation Rate: 6.2 butyl acetate=1
Flash Point: -4 °C CC	LEL: 2.0 %
OSHA Flammability Class: IB	UEL: 11.5 %
Autoignition: 426 °C	Vapor Pressure: 73 mmHg 20 °C
Vapor Density (air = 1): 3.04	Density: 0.8945 g/mL
Specific Gravity (water = 1): 0.9003	Water Solubility: 8.7 %
Coeff. Water/Oil Dist: Not available	Viscosity: 0.43 cP at 20°C
Volatility: 100 %	Molecular Weight: 88.11
Molecular Formula: C-H3-C-O2-C2-H5	

Solvent Solubility

Soluble: ether, benzene, alcohol, acetone, chloroform,

10. Stability and reactivity

10.1. Reactivity:

Will not polymerize. Vapors may form explosive mixture with air.

10.2. Chemical stability:

Stable at normal temperature and pressures.

10.3. Possibility of hazardous reactions:

Will not polymerize. May decompose, exotherm or catch fire with mixed with incompatible materials.

10.4. Conditions to avoid:

Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Avoid inhalation of material or combustion by-products. Keep out of water supplies and sewers. Do not store at elevated temperatures.

10.5. Incompatible materials:

Strong acids, strong bases, chlorosulfonic acid, strong oxidizers, nitrates, lithium tetrahydroaluminate.

10.6. Hazardous decomposition products:

Carbon oxides.

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11. Toxicological information

11.1. Information on toxicological effects:

<u>Acute oral toxicity LD50 rat:</u>	5620 mg/kg (RTECS)
<u>Acute inhalation toxicity:</u>	5.86 mg/l 8 hours (RTECS)
<u>Acute dermal toxicity LD50 rabbit:</u>	>18000 mg/kg (RTECS)
<u>Skin irritation:</u>	No skin irritation (IUCLID)
<u>Eye irritation:</u>	No eye irritation (IUCLID)
<u>Sensitization:</u>	Negative, guinea pig (IUCLID) <u>Genotoxicity in vitro:</u>
<u>Ames test:</u>	negative (IUCLID)
<u>Mutagenicity:</u>	negative, mammalian cell chromosome aberration. (US NTP)
<u>Specific target organ toxicity - single exposure:</u>	Central nervous system, drowsiness, dizziness
<u>Specific target organ toxicity - repeated exposure:</u>	Not classified as specific target organ toxicity.
<u>Aspiration hazard:</u>	Product may be an aspiration hazard

11.2. Additional information:

Further data:	Headache, nausea in high concentrations. Handle using good occupational and environmental health practices.
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12. Ecological information

12.1. Toxicity

<u>Toxicity in fish LC50:</u>	230 mg/L (IUCLID: 96 hour, fathead minnow)
<u>Toxicity to daphnia and other aquatic invertebrates:</u>	720 mg/L; (IUCLID: 48 hour, Daphnia magna)
<u>Toxicity to algae:</u>	3300 mg/L (IUCLID: 48 hr. <i>Scenedesmus quadricauda</i>)
<u>Toxicity to bacteria:</u>	2900 mg/L (IUCLID: 16 hr. <i>Pseudomonas putida</i>)

12.2. Persistence and degradability:

Readily biodegradable 100% (OECD Test Guideline 301D , 28 day)

12.3. Bio accumulative potential:

Not expected (experimental log Pow: 0.73)

12.4. Mobility in soil:

No information available.

12.5. Results of PBT and vPvB assessment:

Assessment not conducted. Not classified as PBT or vPvB.

12.6. Other adverse effects:

12.7. Additional ecological information:

Do not allow product to enter surface waters, wastewater or soil.

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13. Disposal considerations

Waste treatment methods: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Subject to disposal regulations in the U.S.-- EPA 40 CFR 262 Hazardous Waste Number(s): U112.

14. Transport Information

The transport regulations are cited according to international and/or harmonized transport regulations. Possible national deviations and country specific requirements are not considered.

Shipping Name: Ethyl acetate

US DOT
Hazard Class: 3 UN/NA #:
UN1173
Packing Group: II
Required Label(s): 3

TDG/ADR Information Shipping
Name: Ethyl acetate Hazard Class: 3
UN #: UN1173
Packing Group: II Required
Label(s): 3

ADR Tunnel Code Restrictions

This list contains tunnel restriction codes for those substances and/or chemically related entries which are found in chapter 3.2 of the ADR regulations.

ETHYL ACETATE (141-78-6) Restriction(s): D/E [UN1173] (II)

RID Information
Shipping Name: Ethyl acetate Hazard
Class: 3
UN #: UN1173
Packing Group: II
Required Label(s): 3

IATA/ICAO Information Shipping
Name: Ethyl acetate Hazard Class: 3
UN #: UN1173
Packing Group: II Required
Label(s): 3

IMDG Information
Shipping Name: Ethyl acetate Hazard
Class: 3
UN #: UN1173
Packing Group: II

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15. Regulatory information

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

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

ETHYL ACETATE (141-78-6)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes Chronic Health: No Fire: Yes Pressure: No Reactive: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
ETHYL ACETATE	141-78-6	Yes	Yes	Yes	Yes	Yes

Not listed under California Proposition 65

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL.

ETHYL ACETATE (141-78-6) 1 %

Germany Water Classification ETHYL ACETATE (141-78-6)

ID Number 95, hazard class 1 - low hazard to waters

Symbol(s)

F Highly Flammable

Xi Irritant

Risk Phrases

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapors may cause drowsiness and dizziness.

Safety Phrases

S2 Keep out of the reach of children.

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S16 Keep away from sources of ignition - No smoking.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S33 Take precautionary measures against static discharges.

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
ETHYL ACETATE	141-78-6	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

Globally Harmonized System of Classification and Labelling (GHS)

The listed component(s) of this material have been checked for country-specific published classifications according to the Globally Harmonized System of Classification and Labelling (GHS). The results of the queries are displayed below. Please see the individual country listings, as additional interpretations or reference information may be available.

European Union GHS Classifications

Classifications below according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).

ETHYL ACETATE (141-78-6)

Flammable liquids -	Category 2	H225 Highly flammable liquid and vapour.
Serious eye damage/eye Irritation -	Category 2	H319 Causes serious eye irritation.
Specific target organ toxicity /Single exposure -	Category 3	H336 May cause drowsiness or dizziness.

European Union GHS Labelling Information

Labelling information below is according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).

ETHYL ACETATE (141-78-6)

Symbol(s):



Signal Word: Danger

Hazard(s):

- H225:** Highly flammable liquid and vapour
- H319:** Causes serious eye irritation
- H336:** May cause drowsiness or dizziness

Prevention:

- P233:** Keep container tightly closed.
- P210:** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240:** Ground/Bond container and receiving equipment.

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P241: Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

Response:

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378: In case of fire: Use ... for extinction.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

Supplemental:

EUH066: Repeated exposure may cause skin dryness or cracking.

Japan GHS Classifications

Classifications below published under Japan's Chemicals Classification Program according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

ETHYL ACETATE (141-78-6)

Flammable liquids	Category 2	H225 Highly flammable liquid and vapour.
Serious eye damage/eye Irritation	Category 2B	H320 Causes eye irritation.
Specific target organ toxicity - Single exposure	Category 3	H335 May cause respiratory irritation.
Specific target organ toxicity - Single exposure	Category 3	H336 May cause drowsiness or dizziness.

Japan GHS Labelling Information

Labelling information below according to classifications published by Japan's Chemicals Classification Program according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

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ETHYL ACETATE (141-78-6)

Symbol(s):



Signal Word: Danger

Hazard(s):

- H225:** Highly flammable liquid and vapour
- H320:** Causes eye irritation
- H335:** May cause respiratory irritation
- H336:** May cause drowsiness or dizziness

Prevention:

- P233:** Keep container tightly closed.
- P210:** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240:** Ground/Bond container and receiving equipment.
- P241:** Use explosion-proof electrical/ventilating/lighting/.../equipment.
- P242:** Use only non-sparking tools.
- P243:** Take precautionary measures against static discharge.
- P271:** Use only outdoors or in a well-ventilated area.
- P280:** Wear protective gloves/protective clothing/eye protection/face protection.
- P261:** Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264:** Wash ... thoroughly after handling.

Response:

- P304+P340:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313:** If eye irritation persists: Get medical advice/attention.
- P303+P361+P353:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P312:** Call a POISON CENTER or doctor/physician if you feel unwell.
- P370+P378:** In case of fire: Use ... for extinction

Storage:

- P403+P233:** Store in a well-ventilated place. Keep container tightly closed.
- P403+P235:** Store in a well-ventilated place. Keep cool.
- P405:** Store locked up.

Disposal:

- P501:** Dispose of contents/container to ...

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Korea GHS Classifications (SV)

Classifications below published by Korea's Ministry of Environment (MOE), Ministry of Employment and Labor (MOEL) or Office of National Emergency Management (NEMA, physical hazards only).

ETHYL ACETATE (141-78-6)

MOE:

Flammable liquids	Category 2	H225 Highly flammable liquid and vapour.
Skin corrosion/irritation	Category 2	H315 Causes skin irritation.
Specific target organ toxicity - Single exposure	Category 3	H335 May cause respiratory irritation.

MOEL:

Flammable liquids	Category 2	H225 Highly flammable liquid and vapour.
Specific target organ toxicity - Single exposure	Category 1	H370 Causes damage to respiratory system.
Specific target organ toxicity - Single exposure	Category 3	H336 May cause drowsiness or dizziness.

NEMA:

Flammable liquids	Category 2	H225 Highly flammable liquid and vapour.
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Korea GHS Labelling Information

Labelling information below according to classifications published by Korea's Ministry of Environment (MOE), Ministry of Employment and Labor (MOEL) or Office of National Emergency Management (NEMA, physical hazards only).

ETHYL ACETATE (141-78-6)

Symbol(s):



Signal Word: Danger

Hazard(s):

- H225:** Highly flammable liquid and vapour
- H315:** Causes skin irritation
- H335:** May cause respiratory irritation

Prevention:

- P233:** Keep container tightly closed.
- P210:** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240:** Ground/Bond container and receiving equipment.
- P241:** Use explosion-proof electrical/ventilating/lighting/.../equipment.
- P242:** Use only non-sparking tools.
- P243:** Take precautionary measures against static discharge.
- P271:** Use only outdoors or in a well-ventilated area.

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P280: Wear protective gloves/protective clothing/eye protection/face protection.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

Response:

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P362+P364: Take off contaminated clothing and wash it before reuse.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P312: Call a POISON CENTER or doctor/physician if you feel unwell. **P321:** Specific treatment (see ... on this label).

P370+P378: In case of fire: Use ... for extinction.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

Symbol(s):



Signal Word: Danger

Hazard(s):

H225: Highly flammable liquid and vapour

H370: Causes damage to organs

H336: May cause drowsiness or dizziness

Prevention:

P233: Keep container tightly closed.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240: Ground/Bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

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Response:

P308+P313: IF exposed or concerned: Get medical advice/attention.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P321: Specific treatment (see ... on this label). **P370+P378:** In case of fire: Use ... for extinction.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

Symbol(s):



Signal Word: Danger

Hazard(s):

H225: Highly flammable liquid and vapour

Prevention:

P233: Keep container tightly closed.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240: Ground/Bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378: In case of fire: Use ... for extinction.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501: Dispose of contents/container to ...

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New Zealand GHS Classifications

Classifications below according to the Environmental Risk Management Authority's (ERMA) Hazardous Substances and New Organisms (HSNO) Act, as amended.

ETHYL ACETATE (141-78-6)

Flammable liquids -	Category 2	H225 Highly flammable liquid and vapour.
Acute toxicity - Oral -	Category 5	H303 May be harmful if swallowed.
Acute toxicity - Inhalation -	Category 5	H333 May be harmful if inhaled.
Serious eye damage/eye Irritation -	Category 2A	H319 Causes serious eye irritation.
Specific target organ toxicity –		
Repeated exposure - Inhalation -	Category 2	H373 May cause damage to blood, brain, liver, thyroid gland, adrenal gland, and/or body weight through prolonged or repeated exposure if inhaled.

New Zealand GHS Labelling Information

Labelling information below according to classifications published by New Zealand's Environmental Risk Management Authority's (ERMA) Hazardous Substances and New Organisms (HSNO) Act, as amended.

ETHYL ACETATE (141-78-6)

Symbol(s):



Signal Word: Danger

Hazard(s):

- H225:** Highly flammable liquid and vapour
- H303:** May be harmful if swallowed
- H333:** May be harmful if inhaled
- H319:** Causes serious eye irritation
- H373:** May cause damage to organs through prolonged or repeated exposure

Prevention:

- P233:** Keep container tightly closed.
- P210:** Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240:** Ground/Bond container and receiving equipment.
- P241:** Use explosion-proof electrical/ventilating/lighting/.../equipment.
- P242:** Use only non-sparking tools.
- P243:** Take precautionary measures against static discharge.
- P280:** Wear protective gloves/protective clothing/eye protection/face protection.
- P260:** Do not breathe dust/fume/gas/mist/vapours/spray.
- P264:** Wash ... thoroughly after handling.

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Response:

P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P314: Get medical advice/attention if you feel unwell.

P370+P378: In case of fire: Use ... for extinction.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501: Dispose of contents/container to ...

Taiwan GHS Classifications

Information below presented according to Taiwan's Bureau of Standards, Metrology and Inspection (BSMI) of the Ministry of Economic Affairs. This agency has published a series of standards (CNS 15030 1-27 Chemical Classification and Labelling) which provide guidance on classification and labelling of chemicals according to GHS.

ETHYL ACETATE (141-78-6)

Taiwan:

Flammable liquids	Category 2	H225 Highly flammable liquid and vapour.
Serious eye damage/eye Irritation	Category 2A	H319 Causes serious eye irritation.

Taiwan GHS Labelling Information

Labelling information below according to classifications published by Taiwan's Bureau of Standards, Metrology and Inspection (BSMI) of the Ministry of Economic Affairs. This agency has published a series of standards (CNS 150301-27 Chemical Classification and Labelling) which provide guidance on classification and labelling of chemicals according to GHS.

ETHYL ACETATE (141-78-6)

Symbol(s):



Signal Word: Danger

Hazard(s):

H225: Highly flammable liquid and vapour **H319:** Causes serious eye irritation

Prevention:

P233: Keep container tightly closed.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240: Ground/Bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242: Use only non-sparking tools.

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P243: Take precautionary measures against static discharge.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P264: Wash ... thoroughly after handling.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P303+P361+P533: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378: In case of fire: Use ... for extinction.

Storage:

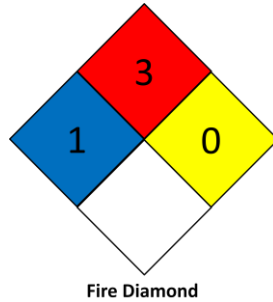
P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501: Dispose of contents/container to ...

15.2. Chemical Safety Assessment:

Sipchem has not conducted a chemical safety assessment for this product.



16. Other information

16.1. Training Advice:

Provide safety information, instruction and training to operators handling Ethyl Acetate.

The information and recommendations herein are taken from data contained in independent, industry recognized references. Although reasonable care has been taken in the preparation of the information herein, Sipchem Chemicals Company. make no guarantee, warranty (express or implied) or other representation and assume no responsibility as to the accuracy or suitability of such information for application of the information, since conditions of its use are beyond control of these companies. Sipchem Chemicals Company shall not bear any liability whatsoever for any loss or damage incurred in connection with the use of this substance.

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16.2. Exposure Scenarios:

Register of relevant Exposure Scenarios (ES) and Risk Management Measure (RMM) out of the CSR (Chemical Safety Report).
The detailed CSR can be provided on request only.

ES Number	Exposure Scenario Name	Sector of Use (SU)	Product Category (PC)	Process Category (PROC)	Environmental Release category (ERC)
1)	Industrial manufacturing of ethyl acetate	SU 8		PROC 1 PROC 2 PROC 8b	ERC 1
2)	Drumming and distribution of Ethyl Acetate	SU 8 SU 9		PROC 1 PROC 2 PROC 8a PROC 8b PROC 9	ERC 2
3)	Industrial formulation of Ethyl Acetate and its mixtures	SU 10		PROC 1 PROC 2 PROC 3 PROC 4 PROC 5 PROC 8a PROC 8b PROC 9	ERC 2
4)	Industrial use as an Extraction Solvent and/or Processing Aid	SU 9		PROC 3 PROC 4 PROC 8a PROC 8b	ERC 1
5)	Industrial Application of Paints, Coatings and other Mixtures containing Ethyl Acetate by way of Spraying		PC 9a	PROC 1 PROC 2 PROC 7 PROC 8a PROC 8b	ERC 4
6)	Industrial Application of Paints and Coatings \ (non-spray application)			PROC 1 PROC 2 PROC 8a PROC 8b PROC 10 PROC 13	ERC 4
7)	Industrial and Professional (end) use of ethyl acetate as a laboratory reagent			PROC 15	ERC4

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ES Number	Exposure Scenario Name	Sector of Use (SU)	Product Category (PC)	Process Category (PROC)	Environmental Release category (ERC)
1)	Professional application of paints, coatings, adhesives and other mixtures/products containing ethyl acetate (indoors or outdoors, spray or non-spray application)	SU 8		PROC 1 PROC 2 PROC 8a PROC 8b PROC 10 PROC 11 PROC 13 PROC 19	ERC 8a ERC 8d
2)	Industrial and Professional (end) use of ethyl acetate as a laboratory reagent			PROC 15	ERC 8a

Uses by Consumers

ES Number	Exposure Scenario Name	Sector of Use (SU)	Product Category (PC)	Environmental Release category (ERC)
1)	Consumer use of Ethyl Acetate in Adhesives and Coatings		PC 1 PC 9a	ERC 8a
2)	Consumer use of ethyl acetate in cosmetic products		PC 39	ERC 8a

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16.3. Identified uses and Risk Management measures

Identified Use (IU) name	Use descriptors	Risk Management Measures (RMMs)
Manufacture	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>Environmental release category (ERC): ERC 1: Manufacture of substances</p> <p>Sector of end use (SU):</p> <p>SU 8: Manufacture of bulk, large scale chemicals (including petroleum products)</p> <p>Subsequent service life relevant for that use?: no</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p> <p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1].</p> <p>Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Sample via closed loop or other system to avoid exposure [E8]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Ensure operation is carried out outdoors [E69], or, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle substance within a closed system [E47]</p> <p>Drain down and flush system prior to equipment break- in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Store substance within a closed system [E84]</p> <p>Avoid carrying out activities involving exposure for more than 15 minutes [OC26]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p>
Distribution	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p> <p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1].</p> <p>Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Locate bulk storage outdoors [E2] or Provide a good standard</p>

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	<p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations</p> <p>Sector of end use (SU):</p> <p>SU 8: Manufacture of bulk, large scale chemicals (including petroleum products)</p> <p>SU 9: Manufacture of fine chemicals</p> <p>Subsequent service life relevant for that use?: no</p>	<p>of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Sample via a closed loop or other system to avoid exposure [E8]</p> <p>Ensure operation is undertaken outdoors [E69], or, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Clear transfer lines prior to de-coupling [E39]</p> <p>Handle substance within a closed system [E47]</p> <p>Provide extract ventilation to points where emissions occur [E54]</p> <p>Drain down and flush system prior to equipment break-in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Store substance within a closed system [E84]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p> <p>Avoid carrying out activities involving exposure for more than 1 hour [OC27]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>
Formulation	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p> <p>PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations</p> <p>Sector of end use (SU):</p> <p>SU 10: Formulation [mixing] of preparations and/or re-packaging (excluding alloys)</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p> <p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1].</p> <p>Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Locate bulk storage outdoors [E2] or Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Sample via closed loop or other system to avoid exposure [E8]</p> <p>Ensure operation is undertaken outdoors [E69], or, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle substance within a closed system [E47]</p> <p>Provide extract ventilation to points where emissions occur [E54]</p> <p>Drain down and flush system prior to equipment break-in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract</p>

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	Subsequent service life relevant for that use?: no	<p>ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p> <p>Avoid carrying out activities involving exposure for more than 1 hour [OC27]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>
Use in Industrial use as an Extraction Solvent and/or Processing Aid	<p>Process category (PROC):</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>Environmental release category (ERC):</p> <p>ERC 1: Manufacture of substances</p> <p>Sector of end use (SU):</p> <p>SU 9: Manufacture of fine chemicals</p> <p>Subsequent service life relevant for that use?: no</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p> <p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1]. Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Locate bulk storage outdoors [E2] or Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Sample via closed loop or other system to avoid exposure [E8]</p> <p>Ensure operation is undertaken outdoors [E69], or, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle substance within a closed system [E47]</p> <p>Provide extract ventilation to points where emissions occur [E54]</p> <p>Drain down and flush system prior to equipment break- in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p> <p>Avoid carrying out activities involving exposure for more than 1 hour [OC27]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>

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Uses by professional workers

Identified Use (IU) name	Use descriptors	Risk Management Measures (RMMs)
Industrial Application of Paints, Coatings and other Mixtures containing Ethyl Acetate by way of Spraying	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 7: Industrial spraying</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>Market sector by type of chemical product:</p> <p>PC 9a: Coatings and paints, thinners, paint removes</p> <p>Environmental release category (ERC):</p> <p>ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles</p> <p>Subsequent service life relevant for that use?: no</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1].</p> <p>Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Locate bulk storage outdoors [E2] or Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Sample via closed loop or other system to avoid exposure [E8]</p> <p>Ensure operation is undertaken outdoors [E69], or , Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle substance within a closed system [E47]</p> <p>Provide extract ventilation to points where emissions occur [E54]</p> <p>Drain down and flush system prior to equipment break- in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p> <p>Avoid carrying out activities involving exposure for more than 1 hour [OC27]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>
Industrial Application of Paints and Coatings \ (non-spray application)	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1].</p>

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	<p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 10: Roller application or brushing PROC 13: Treatment of articles by dipping and pouring</p> <p>Environmental release category (ERC):</p> <p>ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles</p> <p>Subsequent service life relevant for that use?: no</p>	<p>Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Locate bulk storage outdoors [E2] or Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Sample via closed loop or other system to avoid exposure [E8]</p> <p>Ensure operation is undertaken outdoors [E69], or , Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle substance within a closed system [E47]</p> <p>Provide extract ventilation to points where emissions occur [E54]</p> <p>Drain down and flush system prior to equipment break- in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p> <p>Avoid carrying out activities involving exposure for more than 1 hour [OC27]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>
<p>Industrial and Professional (end) use of</p>	<p>Process category (PROC):</p> <p>PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC):</p> <p>ERC 4: Industrial use of processing aids in processes and products, not becoming part of articles</p> <p>Subsequent service life relevant for that use?: no</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p> <p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1]</p> <p>Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p>
<p>Professional application f paints, coatings, adhesives and other</p>	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p>

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<p>mixtures/products containing ethyl acetate (indoors or outdoors, spray or non-spray application)</p>	<p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 10: Roller application or brushing PROC 11: Non-industrial spraying PROC 13: Treatment of articles by dipping and pouring PROC 19: Hand-mixing with intimate contact and only PPE available. Environmental release category (ERC): ERC 8a: Wide dispersive indoor use of processing aids in open systems ERC 8d: Wide dispersive outdoor use of processing aids in open systems Subsequent service life relevant for that use?: no</p>	<p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1]. Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1] Locate bulk storage outdoors [E2] or Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11] Sample via closed loop or other system to avoid exposure [E8] Ensure operation is undertaken outdoors [E69], or, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11] Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11] Handle substance within a closed system [E47] Provide extract ventilation to points where emissions occur [E54] Drain down and flush system prior to equipment break-in or maintenance [E55] Ensure material transfers are under containment or extract ventilation [E66] Handle in a fume cupboard or under extract ventilation [E83] Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16] Avoid carrying out activities involving exposure for more than 1 hour [OC27] Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>
<p>Industrial and Professional (end) use of ethyl acetate as a laboratory reagent</p>	<p>Process category (PROC): PROC 15: Use as laboratory reagent Environmental release category (ERC): ERC 8a: Wide dispersive indoor use of processing aids in open systems Subsequent service life relevant for that use?: no</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1] Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1] Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p>

Updated on: May 2022

		Handle in a fume cupboard or under extract ventilation [E83]
Consumer use of Ethyl Acetate in Adhesives and Coatings	<p>Chemical product category (PC): PC 1: Adhesives, sealants PC 9a: Coatings and paints, thinners, paint removes</p> <p>Environmental release category (ERC): ERC 8a: Wide dispersive indoor use of processing aids in open systems</p> <p>Subsequent service life relevant for that use?: no</p>	<p>Avoid direct skin or eye contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur.</p> <p>Wash off any contamination immediately. Provide basic employee training to prevent / minimize exposures and to report any skin or eye problems that may develop [E3.1]. Other protection measures such as impervious suits and face shields or goggles may be required during high dispersion activities which are likely to lead to substantial aerosol release. [E4.1]</p> <p>Locate bulk storage outdoors [E2] or Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Sample via closed loop or other system to avoid exposure [E8]</p> <p>Ensure operation is undertaken outdoors [E69], or, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]</p> <p>Handle substance within a closed system [E47]</p> <p>Provide extract ventilation to points where emissions occur [E54]</p> <p>Drain down and flush system prior to equipment break- in or maintenance [E55]</p> <p>Ensure material transfers are under containment or extract ventilation [E66]</p> <p>Handle in a fume cupboard or under extract ventilation [E83]</p> <p>Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training [PPE16]</p> <p>Avoid carrying out activities involving exposure for more than 1 hour [OC27]</p> <p>Avoid carrying out activities involving exposure for more than 4 hours [OC28]</p>