



Safety Data Sheet

Revision Date: 14-aug-2013

Version No.: 1

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

Product identifier

Trade name/designation	Ethyl Acetate, HiPerSolv CHROMANORM
Product No.	BDH83621 (VWR International)
Substance name	Ethyl acetate
CAS No.	141-78-6
INDEX no.	607-022-00-5
other means of identification	Acetic acid ethyl ester

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses For Laboratory use only. Not for Drug, Food or Household use.

Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

VWR International LLC

Street	100 Matsonford Road Radnor Corporate Center, Building One, Suite 200 P. O. Box 6660
Postal code/city	Radnor, PA 19087
country	United States of America
Telephone	+1-800-932-5000 toll-free within US/CA +1-610-386-1700
Telefax	+1-610-728-2103
E-mail	NAMSDS@vwr.com

Emergency telephone

Telephone	+1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA) +1-613-966-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)
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2. Hazards identification

Classification of the substance or mixture

hazard classes and hazard categories	Hazard Statements	classification procedure	remark
Flammable liquid, category 2	H225		
Eye irritation, category 2	H319		
Specific target organ toxicity (single exposure), category 3, narcotic effect	H336		

Target Organs: Central nervous system, Liver, Kidney, Blood

OSHA hazards: Flammable liquid, Target Organ Effect, Irritant

Other hazards : Repeated exposure may cause skin dryness or cracking.

Label elements



Signal word

Danger

Hazard Statements

H225	Flammable liquid and vapour.
H333	May be harmful if inhaled.
H336	May cause drowsiness or dizziness.
H319	Causes serious eye irritation.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards

SVHC

No

3. Composition/ Information on ingredients

Molecular formula	C4H8O2
Molecular weight (g/mol)	88.11 g/mol
CAS No.	141-78-6
EC No	205-500-4
INDEX no.	607-022-00-5

4. First-aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting. Give nothing to eat or drink.

Self-protection of the first aider

First aider: Pay attention to self-protection!

Information to physician:

Symptoms	No data available
Hazards	No data available
Treatment	No data available

5. Firefighting measures

Suitable extinguishing media

Water spray, ABC-powder, Carbon dioxide (CO₂), Nitrogen

Extinguishing media which must not be used for safety reasons:

No restriction

Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide

Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Avoid generation of dust. Do not breathe dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Environmental precautions

Do not allow to enter into surface water or drains. Danger of explosion.

Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated objects and areas thoroughly observing environmental regulations. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Additional information

Clear spills immediately.

7. Handling and storage**Precautions for safe handling**

Avoid: Inhalation. Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Keep away from sources of ignition. - No smoking. Usual measures for fire prevention. Take precautionary measures against static discharge.

Conditions for safe storage, including any incompatibilities

storage temperature

Ambient temperature

Keep container tightly closed in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Always close containers tightly after the removal of product.

Specific end use(s)

No data available

8. Exposure controls / Personal protection**Control parameters**

ACGIH – 400 ppm TWA

NIOSH – 400 ppm TWA; 1400 mg/m³ TWA; 2000 (10% LEL) ppm IDLH

OSHA PELs – 400 ppm TWA; TWA 1400 mg/m³ (8hrs)

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective, NIOSH approved clothing must be worn.

Eye / face protection

Wear safety glasses with side protection.

Skin protection

When handling with chemical substances, chemical resistant, imperious protective gloves should be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Protective clothing

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

9. Physical and chemical properties

Information on basic physical and chemical properties

(a) Appearance	
Physical state	liquid
Colour	colourless
(b) Odour	No data available
(c) Odour threshold	No data available

Safety relevant basic data

(d) pH	No data available
(e) Melting point/freezing point	-83°C
(f) Initial boiling point and boiling range	77.1°C (1013 hPa)
(g) Flash point	-4°C
(h) Evaporation rate	No data available
(i) Flammability (solid, gas)	Highly flammable liquid and vapour.
(j) Upper/lower flammability or explosive limits	
Lower explosion limit (Vol-%)	2.1
Upper explosion limit (Vol-%)	11.5
(k) Vapour pressure	93 hPa (20°C)
(l) Vapour density	3.04 (20)
(m) Relative density	0.902 g/cm ³ (20°C)
(n) Solubility(ies)	

Water solubility (g/l) at °C:	85.3 g/l (20°C) 20
Soluble (g/l) in	No data available
(o) Partition coefficient: n-octanol/water	0.73 (20°C)
(p) Auto-ignition temperature	460°C
(q) Decomposition temperature	No data available
(r) Viscosity	
Kinematic viscosity	No data available
Dynamic viscosity	0.44 mPa*s (20°C)
(s) Explosive properties	not applicable
(t) Oxidising properties	not applicable

Other information

Bulk density	No data available
refraction index	1.3719 (589 nm, 20°C)
dissociation constant	No data available
Surface tension	No data available
Henry constant	No data available

10. Stability and reactivity

Reactivity
No data available

Chemical stability

No data available

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

No data available

Hazardous decomposition products

No data available

Additional information

No data available

11. Toxicological information

Information on toxicological effects

Acute effects

Acute oral toxicity	
Effective dose	LD50: 5620 mg/kg
species:	rat
Exposure time	
remark	
source	RTECS
Acute dermal toxicity	

Effective dose LD50: Min. 18000 mg/kg
species: rabbit
Exposure time
remark
source Merck KGaA

Acute inhalation toxicity
Effective dose No data available
species: No data available
Exposure time
remark
source

Irritant and corrosive effects

Primary irritation to the skin
Exposure time
species:
Result

Irritation to eyes
Exposure time
species:
Result

Irritation to respiratory tract
Exposure time
species:
Result

Sensitization

In case of skin contact not sensitizing.
After inhalation not sensitizing.

Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

not relevant

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity/Genotoxicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not relevant

Other adverse effects

No data available

Additional information

No data available

12. Ecological information

Ecotoxicity

Acute (short-term) fish toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) fish toxicity

LC50: No data available

EC50

species:

Exposure time

Acute (short-term) daphnia toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) daphnia toxicity

LC50: No data available

EC50

species:

Exposure time

Acute (short-term) algae toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) algae toxicity

LC50: No data available

EC50

species:

Exposure time

Persistence and degradability

No data available

Bioaccumulative potential

Partition coefficient: n-octanol/water 0.73 (20°C)

Mobility in soil

No data available

Results of PBT assessment

No data available

Other adverse effects

No data available

13. Disposal considerations

Waste treatment methods

Appropriate disposal / Product

Dispose in accordance with applicable federal, state and local regulations.

Waste code product 07 01 04 (other organic solvents, washing liquids and mother liquors)

Appropriate disposal / Package

Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

No data available

14. Transport information

Land transport (ADR/RID)

UN-No.	1173
Proper Shipping Name	ETHYL ACETATE
Class(es)	3
Classification code:	FT1
Packing group	II
Hazard label(s)	3

Sea transport (IMDG)

UN-No.	1173
Proper Shipping Name	ETHYL ACETATE
Class(es)	3
Classification code:	FT1
Packing group	II
Marine pollutant	
Segregation group	

Air transport (ICAO-TI / IATA-DGR)

UN-No.	1173
Proper Shipping Name	ETHYL ACETATE
Class(es)	3
Classification code:	FT1

Packing group

II

Additional information

No data available

15. Regulatory information

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

TSCA 8b Inventory: Listed

DSL/NDSL: Listed

US State Right-to-Know Regulations:

Massachusetts, New Jersey, Pennsylvania

California Proposition 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth or any other reproductive defects.

Canada WHMIS Hazard Class:

B2 Flammable liquid,
D2B Toxic material

Chemical Safety Assessment

No data available

16. Other information

Hazard Statements

H225	Flammable liquid and vapour.
H333	May be harmful if inhaled.
H336	May cause drowsiness or dizziness.
H319	Causes serious eye irritation.

Other hazards

WHMIS Classification

B2 Flammable liquid

D2B Toxic Material Causing Other Toxic Effects - Moderate eye irritant

HMIS Classification

Health hazard: 2
Chronic health hazard: *
Flammability: 3
Physical hazards: 0

NFPA Rating

Health hazard: 1
Fire: 3
Reactivity hazard: 0

SVHC

No

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.