

Material Safety Data Sheet

Ethanol 79/E21

Version 1.01

Revision Date 05.08.2005



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

Trade name	Ethanol 79/E21
Use	raw material for printing inks and printing ink additives
Company	Hitech Chemicals

2. Composition/information on ingredients

ethanol; ethyl alcohol

content: ≥ 70.00 - < 80.00 %

CAS-No. 64-17-5
Symbol(s) F

Index-No. 603-002-00-5
R-phrase(s) -R11

EG-Nr.: 200-578-6

ethyl acetate

content: ≥ 20.00 - < 25.00 %

CAS-No. 141-78-6
Symbol(s) F, Xi

Index-No. 607-022-00-5
R-phrase(s) -R11 -R36 -R66 -R67

EG-Nr.: 205-500-4

For the full text of the R phrases mentioned in this Section, see Section 16.

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3. Hazards identification

Identification of the risks

R11	Highly flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

4. First aid measures

General advice	Consult a physician if necessary.
Inhalation	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Consult a physician.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Call a physician immediately.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician immediately.

5. Fire-fighting measures

Suitable extinguishing media	water spray, foam, dry powder
Specific hazards during fire fighting	Flash back possible over considerable distance. Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Further information	Cool containers / tanks with water spray.

6. Accidental release measures

Personal precautions	Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist.
Environmental precautions	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste.

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Additional advice Never return spills in original containers for re-use.

7. Handling and storage

Handling

Safe handling advice Do not breathe vapours or spray mist. Wear personal protective equipment.

Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Use explosion-proof equipment.

Storage

Requirements for storage areas and containers Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure controls / personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

no data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

no data available

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection gloves suitable for permanent contact:
Material: butyl-rubber
Break through time: 4 h
Material thickness: 0.5 mm
unsuitable gloves
Material: leather, nitrile rubber/nitrile latex, polyvinylchloride, natural rubber/natural latex

Eye protection safety glasses with side-shields

Skin and body protection protective suit, safety shoes

Hygiene measures Wash hands before breaks and immediately after handling the product.

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Protective measures *Wear suitable protective equipment.*

9. Physical and chemical properties

Form	<i>liquid</i>
Colour	<i>colourless</i>
Odour	<i>alcoholic</i>
pH	<i>neutral</i>
Melting point/range	<i>-107.69 °C</i>
Boiling point/range	<i>78.11 °C</i>
Flash point	<i>6 °C</i>
Ignition temperature	<i>363 °C</i>
Lower explosion limit	<i>3.3 %(V)</i>
Upper explosion limit	<i>19 %(V)</i>
Vapour pressure	<i>66.2 hPa; 20 °C</i>
Density	<i>0.813 g/cm³; 20 °C</i>
Water solubility	<i>completely miscible, completely soluble</i>
Solubility in other solvents	<i>Medium: Diethylether; completely soluble</i>
Viscosity, dynamic	<i>1.21 mPa.s</i>
Relative vapour density	<i>1.9</i>

10. Stability and reactivity

Materials to avoid	<i>oxidizing agents, acids and bases</i>
Hazardous decomposition products	<i>Carbon oxides</i>

11. Toxicological information

Acute oral toxicity	<i>Ethanol:</i>
	<i>LD50 rat: 7,060 mg/kg; literature value</i>
	<i>Ethyl Acetate:</i>
	<i>LD50 rat: 5,620 mg/kg; literature value</i>
	<i>Ethyl Acetate:</i>
	<i>LD50 rabbit: 4,940 mg/kg; literature value</i>
Acute inhalation toxicity	<i>Ethanol:</i>
	<i>LC50 rat: 66,000 mg/l; literature value; 4 h</i>

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Acute dermal toxicity

Ethyl Acetate:
LC50 rabbit: 2,500 mg/l; literature value; 4 h

Ethyl Acetate:
LC50 rat: 4,000 mg/l; literature value; 4 h

Ethanol:
LDLo rabbit: 20,000 mg/kg; literature value

12. Ecological information

Ecotoxicity effects

Toxicity to fish

Ethanol:
LC50 Pimephales promelas: 15,300 mg/l; 96 h; literature value

Ethyl acetate:
LC50 Pimephales promelas: 230 mg/l; 96 h; literature value

13. Disposal considerations

Product

Dispose of in accordance with local regulations.

Contaminated packaging

Store containers and offer for recycling of material when in accordance with the local regulations.

14. Transport information

ADR

UN-No: 1993; Class: 3; Packaging group: II; F1; Description of the goods: FLAMMABLE LIQUID, N.O.S. (ethanol, ethyl acetate)

RID

UN-No: 1993; Class: 3; Packaging group: II; F1; Description of the goods: FLAMMABLE LIQUID, N.O.S. (ethanol, ethyl acetate)

IMDG

UN-No: 1993; Class: 3; EmS: F-E, S-D; Packaging group: II; Description of the goods: FLAMMABLE LIQUID, N.O.S. (ethanol, ethyl acetate)

ICAO/IATA

UN-No : 1993; Class: 3; Packaging group: II; Description of the goods: Flammable liquid, n.o.s. (ethanol, ethyl acetate)

15. Regulatory information

Labelling

Regulatory base

1999/45/EC

Symbol(s)

Xi: Irritant
F: Highly flammable

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R-phrase(s)	<i>R11: Highly flammable. R36: Irritating to eyes. R67: Vapours may cause drowsiness and dizziness.</i>
S-phrase(s)	<i>S 9: Keep container in a well-ventilated place. 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. S60: This material and its container must be disposed of as hazardous waste.</i>

16. Other information

Full text of R-phrases referred to under sections 2 and 3:

<i>R11</i>	<i>Highly flammable.</i>
<i>R36</i>	<i>Irritating to eyes.</i>
<i>R66</i>	<i>Repeated exposure may cause skin dryness or cracking.</i>
<i>R67</i>	<i>Vapours may cause drowsiness and dizziness.</i>

This MSDS summarises at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product, and in particular how to safely handle, use, store and transport the product in the workplace. Since we cannot anticipate or control conditions under which the product may be handled, used, stored or transported, each user must, prior to usage, review this MSDS in the context of how the user intends to handle, use, store or transport the product in the workplace and beyond, and communicate such information to all relevant parties. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

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