



Safety Data Sheet

according to Regulation (EU) No. 1907/2006

553.000 Renia - Hardener =C= (Cross-Linker)

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call a physician.

After contact with skin

Take off all contaminated clothing immediately. Wash off with soap and water. Grease skin after contact.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

After ingestion

Do not induce vomiting. Call a physician immediately.

Advice to doctor

In case of shortness of breath, give oxygen. Risk of product entering the lungs on vomiting after ingestion. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

5. Fire-fighting measures

Suitable extinguishing media

Suitable extinguishing media carbon dioxide (CO₂) dry chemical foam

Extinguishing media which must not be used for safety reasons

high volume water jet

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

In the event of fire and/or explosion do not breathe fumes. In use, may form flammable/explosive vapour-air mixture.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Additional information

Use water spray to cool unopened containers.

6. Accidental release measures

Personal precautions

Remove all sources of ignition. When using do not smoke. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up/taking up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dispose of as special waste in compliance with local and national regulations

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas. Use only in area provided with appropriate exhaust ventilation. Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. In use, may form flammable/explosive vapour-air mixture.

Storage

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place. Keep at temperatures between 5 and 40° C.

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Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep away from heat. Protect against freezing. Keep container tightly closed in a dry and well-ventilated place. Keep away from direct sunlight.

Storageclass (VCI): 3

8. Exposure controls/personal protection

Exposure limit values
Exposure limits (EH40)

CAS-No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
141-78-6	Ethyl acetate	200	-	-	TWA (8 h)	WEL
		400	-	-	STEL (15 min)	WEL

Exposure controls

Protective and hygiene measures

Avoid contact with the skin and the eyes. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment. (gas filter type A2)

Hand protection

solvent-resistant gloves: nitrile rubber, butyl-rubber, fluoroc rubber
Test suitability of gloves before use.

Eye protection

safety glasses

9. Physical and chemical properties

General information

Physical state: liquid
Colour: colourless
Odour: ester-like, mild

Important health, safety and environmental information

pH-Value: not applicable Test method

Changes in the physical state

Boiling point: 77 °C DIN 53 171
Flash point: -3 °C DIN 51 755
Lower explosion limits: 2,1 vol. %
Upper explosion limits: 11,5 vol. %

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Ignition temperature:	460 °C	DIN 51 794
Vapour pressure: (at 20 °C)	97 hPa	DIN EN 12
Density (at 20 °C):	1.000 g/cm ³	DIN 51 757
Water solubility:	Decomposes in contact with water.	
Solvent content:	65 %	

Other information**10. Stability and reactivity****Conditions to avoid**

Thermal decomposition can take place above 200°C. No decomposition if used as directed.

Materials to avoid

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Hazardous decomposition products

Heating can release hazardous gases. Carbon oxides In the event of fire the following can be released:
carbon dioxide (CO₂) Carbon monoxide

11. Toxicological information**Acute toxicity**

Health injuries are not known or expected under normal use.

Specific effects in experiment on an animal

LD50/oral/rat = > 2000 mg/kg
Mild eye irritation (rabbit)

Corrosive and irritant effects

May cause skin and eye irritation in susceptible persons. Contact with eyes may cause irritation.

Sensitising effects

No data is available on the product itself.

Severe effects after repeated or prolonged exposure

Inhalation of vapours in high concentration can cause narcotic effects and metabolic acidosis.

Carcinogenic/mutagenic/toxic effects for reproduction

No data is available on the product itself.

12. Ecological information**Ecotoxicity**

When under water, the product is transformed to poly-urea at the interface while producing CO₂. Liquid soap or water soluble solvents enhance this reaction strongly.

Mobility

No data is available on the product itself.

Persistence and degradability

Taking into consideration the properties of several components, the product is estimated not to be readily biodegradable according to OECD classification.

Bioaccumulative potential

No data is available on the product itself.

Further information

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13. Disposal considerations

Advice on disposal

Dispose of as special waste in compliance with local and national regulations

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Offer rinsed packaging material to local recycling facilities. Recycling of packaging materials (dual system).

14. Transport information

Land transport (ADR/RID)

UN number: 1993

ADR/RID class: 3

Classification code: F1

Warning plate

Hazard-no.: 33

Hazard label: 3



ADR/RID packing group: II

Limited quantity: LQ4

Tunnel restriction code: D/E

Description of the goods

FLAMMABLE LIQUID, N.O.S. (ethyl acetate)

Other applicable information (land transport)

: 274 - 330 - 601 - 640D

: 2

Tunnelbeschränkungscode 2 (D1E)

Inland waterways transport

UN number: 1993

ADNR class: 3

Classification code: F1

Hazard label: 3



Packing group: II

Limited quantity: 1 Lliter

Description of the goods

FLAMMABLE LIQUID, N.O.S. (ethyl acetate)

Other applicable information (inland waterways transport)

: 640H

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E1

Marine transport

UN number: 1993
IMDG code: 3
Marine pollutant: •
Hazard label: 3



IMDG packing group: II
EmS: F-E, S-E
Limited quantity: 1 Liter

Description of the goods

FLAMMABLE LIQUID, N.O.S. (ethyl acetate)

Other applicable information (marine transport)

Staukategorie B

Air transport

UN/ID number: 1993
ICAO/IATA-DGR: 3
Hazard label: 3



ICAO packing group: II
Limited quantity Passenger: 10 L
IATA-packing instructions - Passenger: 309
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 310
IATA-max. quantity - Cargo: 220 L

Description of the goods

FLAMMABLE LIQUID, N.O.S. (ethyl acetate)

Other applicable information (air transport)

: Y309
E3
Special provisions: A3

15. Regulatory information**Labelling**

Danger symbols:

F - Highly flammable; Xi - Irritant



F - Highly flammable

Xi - Irritant

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R phrases

- 11 Highly flammable.
- 36 Irritating to eyes.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

S phrases

- 09 Keep container in a well-ventilated place.
- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe gas .
- 29 Do not empty into drains.
- 33 Take precautionary measures against static discharges.

Additional advice on labelling

According to (National equivalent of EC-Dir. 67/548), as amended, the product is labelled as follows: The product is classified and labelled in accordance with Directive 1999/45/EC. 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.

EU regulatory information

1999/13/EC (VOC): 65 % (650 g/l)

Additional information

Observe employment restrictions under the law for the protection of young people at work (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (EC 92/85/EEC) for expectant or nursing mothers.

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

16. Other information**Full text of R-phrases referred to under sections 2 and 3**

- 11 Highly flammable.
- 26 Very toxic by inhalation.
- 36 Irritating to eyes.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 40 Limited evidence of a carcinogenic effect.
- 42/43 May cause sensitization by inhalation and skin contact.
- 52 Harmful to aquatic organisms.
- 53 May cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

Further Information

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.



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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)