

Safety Data Sheet

according to WHMIS

TIP TOP SOLUTION NRX-MOD COMP. A

Revision date: 13.12.2024

Product code: 00156-0480

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1. Identification

Product identifier

TIP TOP SOLUTION NRX-MOD COMP. A

Art.-No.

525 5023

Substance name: Ethyl acetate

CAS No: 141-78-6

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

Details of the supplier of the safety data sheet

Manufacturer

Company name: REMA TIP TOP AG
Street: Gruber Strasse 65
Place: D-85586 Poing
Telephone: +49 (0) 8121 / 707 - 100
Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

Supplier

Company name: REMA TIP TOP / North America Inc.
Street: 1500 Industrial Blvd
Place: Madison, GA 30650, USA
Telephone: +1 800 225 7362,
Internet: www.rematiptop.com

Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
(001) 352 323 3500 Infotrac/GBK GmbH-ID: 93591

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015

Flammable liquids: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3 (narcotic effects)

Label elements

WHMIS 2015**Signal word:** Danger**Pictograms:****Hazard statements**

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

Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take action to prevent static discharges.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.



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

Store in a well-ventilated place. Keep cool.

Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

Vapours may form explosive mixture with air.

3. Composition/information on ingredients

Substances

Chemical characterization

Mixture containing following substances with additives :

Sum formula: C₄ H₈ O₂

Molecular weight: 88,11 g/mol

Hazardous components

CAS No	Chemical name	Quantity
141-78-6	Ethyl acetate	> 99 %

4. First-aid measures

Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

In the event of symptoms refer for medical treatment.

After contact with skin

Wash off with soap and plenty of water.

Consult a doctor if skin irritation persists.

After contact with eyes

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

Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

Most important symptoms and effects, whether acute or delayed

Causes serious eye irritation.

May cause drowsiness or dizziness.

Repeated exposure may cause skin dryness or cracking.

Attention, beware danger of aspiration.

WHMIS: This material is considered hazardous by WHMIS 2015 (Workplace Hazardous Materials Information System).

Indication of immediate medical attention and special treatment needed

Treat symptoms.

5. Fire-fighting measures



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Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet.

Specific hazards arising from the hazardous product

Fire may produce:

carbon monoxide and carbon dioxide

Special protective equipment and precautions for fire-fighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Vapours are heavier than air and spread along ground.

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Use only explosion-proof equipment.

Ensure adequate ventilation.

Keep away sources of ignition.

unbKeep away noninvolved persons.

For non-emergency personnel

Do not breathe vapours.

Avoid contact with skin, eyes and clothing.

For emergency responders

In case of vapour formation use respirator.

Use personal protective clothing.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal look up chapter 13.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Vapours are heavier than air and spread along ground.

Keep a good ventilation and air-exhaust at the place of work.

Avoid contact with skin, eyes and clothing.

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Advice on protection against fire and explosion

- Keep away from heat and sources of ignition.
- Do not smoke.
- Take precautionary measures against static discharges.
- Use only explosion-proof equipment.

Advice on general occupational hygiene

- Do not inhale vapours.
- Wash hands before breaks and immediately after handling the product.
- When using do not eat, drink or smoke.
- Treat subsequently with skin cream.
- Remove and wash contaminated clothes before re-use.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

- Keep container tightly closed in a dry, cool and well-ventilated place.
- Pay attention to anti-explosion rules.

Hints on joint storage

- Incompatible with oxidizing agents.

Further information on storage conditions

- Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/Personal protection**Control parameters****Exposure limits (ACGIH)**

CAS No	Chemical name	ppm	mg/m ³	F/ml	Category	Origin
141-78-6	Ethyl acetate	400	1440		TWA (8 h)	ACGIH-2024

Exposure controls**Appropriate engineering controls**

- Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment**Eye/face protection**

- Tightly fitting goggles.
- Eye wash bottle with pure water.

Hand protection

- Protective gloves resistant to chemicals made of butyl, Minimum coat thickness 0,7 mm, Permeation resistance (wear duration) approx. 120 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de. This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
- Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

- Solvent-resistant apron.

Respiratory protection

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

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state: Liquid

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Colour: Colourless
Odour: Fruity

Test method**Changes in the physical state**

Melting point/freezing point: - 83 °C DIN 51751
Boiling point or initial boiling point and boiling range: 76 - 78 °C DIN 53757
Sublimation point: n.a.
Softening point: n.d.
Flash point: - 1 °C DIN 51755

Flammability

Solid/liquid: n.a.

Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosive limits: 2,1 vol. %
Upper explosive limits: 11,5 vol. %
Auto-ignition temperature: 460 °C DIN 51794

Self-ignition temperature

Solid: n.a.
Gas: n.a.
Decomposition temperature: n.d.
pH-Value: n.d.
Viscosity / dynamic: 0,44 mPa·s
(at 20 °C)
Viscosity / kinematic: n.d.
Flow time: n.d.
Water solubility: 79 g/L
(at 20 °C)

Solubility in other solvents

n.d.
Partition coefficient n-octanol/water: Log Pow: 0,68
Vapour pressure: 100 hPa
(at 20 °C)
Vapour pressure: 360 hPa
(at 50 °C)
Density (at 20 °C): 0,902 g/cm³ DIN 51757
Bulk density: n.a.
Relative vapour density: n.d.

Other information**Information with regard to physical hazard classes**

Sustaining combustion: Sustaining combustion
Oxidizing properties
Not oxidising.

Other safety characteristics

Solvent separation test: 0 %
Solvent content: 100 %



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Evaporation rate:

n.d.

Further Information

Minimum ignition energy: 1,42 mJ

10. Stability and reactivity

Reactivity

No decomposition if stored and applied as directed.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Reactions with acids, alkalies and oxidising agents.

Conditions to avoid

To avoid thermal decomposition, do not overheat.
Vapour/air mixtures are explosive at intensive warming.
Heating can release vapours which can be ignited.

Incompatible materials

Oxidizing agents
Acids and bases.

Hazardous decomposition products

No hazardous decomposition products known.
Fire may produce:
Carbon monoxide and carbon dioxide

11. Toxicological information

Information on toxicological effects**Acute toxicity**

Based on available data, the classification criteria are not met.
LD50/oral/rat: 5620 m/kg
LD50/dermal/rabbit: > 18000 mg/kg
LC50/inhalativ/rat: 56 mg/l/4 h

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

Based on available data, the classification criteria are not met.
Sensitization skin (guinea pig): Non-sensitizing [OECD 406]

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
Mutagenicity: Ames-Test: Negative [OECD 471]; Chromosomal aberration test: Negative

STOT-single exposure

May cause drowsiness or dizziness. (Ethyl acetate)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

Skin and eye contact, inhalation and ingestion.

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Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Information on other hazards**Other information**

Effects of breathing high concentrations of vapour may include. Headache, dizziness, weakness, unconsciousness.

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

12. Ecological information**Ecotoxicity**

LC50/Pimephales promelas/96 h = 230 mg/l

EC50/Daphnia magna/48 h = 610 mg/l

EC50/Scenedesmus subspicatus/48 h = 5600 mg/l

NOEC/Daphnia magna/21 d = 2,4 mg/l

NOEC/Desmodesmus subspicatus/72 h > 100 mg/l [OECD 201]

Persistence and degradability

Biodegradable (OECD): 100 % (28 d) [OECD 301D]

Bioaccumulative potential

Low bio-accumulation can be estimated because of low log Po/w. (Log Pow: 0,68)

Mobility in soil

No data available

Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

Other adverse effects

Slightly water hazardous.

Further information

Do not flush into surface water or sanitary sewer system.

13. Disposal considerations**Waste treatment methods****Disposal recommendations**

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

14. Transport information**Canadian TDG**

<u>UN number:</u>	UN 1173
<u>Proper shipping name:</u>	Ethyl acetate
<u>Hazard classes:</u>	3
<u>Packing group:</u>	II
Hazard label:	3
Limited quantity:	1L

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**Marine transport (IMDG)**

UN number or ID number: UN 1173
United Nations proper shipping name: ETHYL ACETATE
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Limited quantity: 1 L / 30 kg
Excepted quantity: E2
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1173
United Nations proper shipping name: ETHYL ACETATE
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

15. Regulatory information

Canadian regulations**DSL/NDSL inventory status**

All components are listed on the DSL Inventory.

National Pollutant Release Inventory (NPRI)

Ethyl acetate (141-78-6)

WHMIS classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

16. Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,5,6,9,10,11,14.



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Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Further Information

Data of sections 4 to 8, as well as 10 to 12, do not necessarily refer to the use and the regular handling of the product (in this sense consult package leaflet and expert information), but to release of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)