## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

TIP TOP SOLUTION NRX-MOD COMP. A

**Art.-No.**

525 5023

| | |
|---|---|
| Substance name: | Ethyl acetate |
| REACH Registration Number: | 01-2119475103-46-0000 |
| CAS No: | 141-78-6 |
| Index No: | 607-022-00-5 |
| EC No: | 205-500-4 |

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

**Use of the substance/mixture**

Primer

### 1.3. 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 INDUSTRY UK LTD |
| Street: | Plumtree Industrial Estate, Harworth |
| Place: | Doncaster, DN11 8EW, South Yorkshire |
| Telephone: | +44 (0)1302 711233 |
| Internet: | www.rema-tiptop.co.uk |

**1.4. Emergency telephone number:**

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**GB CLP Regulation**

Flam. Liq. 2; H225
Eye Irrit. 2; H319
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

**GB CLP Regulation**

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |

| | |
|---|---|
| H336 | May cause drowsiness or dizziness. |

**Precautionary statements**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P243 | Take action to prevent static discharges. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep 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. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |

**Special labelling of certain mixtures**

| | |
|---|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

### 2.3. Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
This substance does not have endocrine disrupting properties with respect to non-target organisms.
Vapours may form explosive mixture with air.

## SECTION 3: Composition/information on ingredients

### 3.1. 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 |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 141-78-6 | Ethyl acetate | | | > 99 % |
| | 205-500-4 | 607-022-00-5 | 01-2119475103-46-0000 | |
| | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066 | | | |

Full text of H and EUH statements: see section 16.

## SECTION 4: First aid measures

### 4.1. 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.

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

Causes serious eye irritation.
May cause drowsiness or dizziness.
Repeated exposure may cause skin dryness or cracking.
Attention, beware danger of aspiration.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptoms.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable extinguishing media**

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

**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

Fire may produce:
carbon monoxide and carbon dioxide

**5.3. Advice for firefighters**

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.

## SECTION 6: Accidental release measures

**6.1. 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.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.

**6.3. 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.

### 6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

## SECTION 7: Handling and storage

### 7.1. 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.

**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.

### 7.2. 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.

### 7.3. Specific end use(s)

Primer

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Exposure limits (EH40)**

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|---|---|---|---|---|---|---|
| 141-78-6 | Ethyl acetate | 200 | 734 | | TWA (8 h) | WEL |
| | | 400 | 1468 | | STEL (15 min) | WEL |

### 8.2. 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 (EN 166).
Eye wash bottle with pure water (EN 15154).

**Hand protection**

Protective gloves resistant to chemicals made off 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 (EN 467).

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | Liquid |
| 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 explosion limits: | 2,1 vol. % | |
| Upper explosion 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: (at 20 °C) | 0,44 mPa·s | |
| Viscosity / kinematic: | n.d. | |
| Flow time: | n.d. | |
| Water solubility: (at 20 °C) | 79 g/L | |

**Solubility in other solvents**

n.d.

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

**9.2. 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 % |
| Evaporation rate: | n.d. |

**Further Information**

Minimum ignition energy: 1,42 mJ

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Reactions with acids, alkalies and oxidizing agents

**10.4. 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.

**10.5. Incompatible materials**

oxidizing agents
Acids and bases.

**10.6. Hazardous decomposition products**

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

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in GB CLP Regulation**

**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/inhalation/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.
Repeated exposure may cause skin dryness or cracking.

**Sensitising 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.

**Additional information on tests**

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

### 11.2. Information on other hazards

**Endocrine disrupting properties**

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

**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.

## SECTION 12: Ecological information

### 12.1. Toxicity

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]

### 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

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

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

### 12.6. Endocrine disrupting properties

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

**12.7. Other adverse effects**

Low hazard to waters.

**Further information**

Do not flush into surface water or sanitary sewer system.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Disposal recommendations**

Where possible recycling is preferred to disposal.
Can be incinerated, when in compliance with local regulations.

**List of Wastes Code - residues/unused products**

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

**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.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 1173 |
| **14.2. UN proper shipping name:** | ETHYL ACETATE |
| **14.3. Transport hazard class(es):** | 3 |
| **14.4. Packing group:** | II |
| Hazard label: | 3 |

| | |
|---|---|
| Classification code: | F1 |
| Limited quantity: | 1 L / 30 kg |
| Excepted quantity: | E2 |
| Transport category: | 2 |
| Hazard No: | 33 |
| Tunnel restriction code: | D/E |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 1173 |
| **14.2. UN proper shipping name:** | ETHYL ACETATE |
| **14.3. Transport hazard class(es):** | 3 |
| **14.4. Packing group:** | II |
| Hazard label: | 3 |

| | |
|---|---|
| Classification code: | F1 |
| Limited quantity: | 1 L / 30 kg |
| Excepted quantity: | E2 |

**Marine transport (IMDG)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 1173 |
| **14.2. UN proper shipping name:** | ETHYL ACETATE |
| **14.3. Transport hazard class(es):** | 3 |
| **14.4. 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)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 1173 |
| **14.2. UN proper shipping name:** | ETHYL ACETATE |
| **14.3. Transport hazard class(es):** | 3 |
| **14.4. 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 |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Handle in accordance with good industrial hygiene and safety practice.

**14.7. Maritime transport in bulk according to IMO instruments**

The transport takes place only in approved and appropriate packaging.

## SECTION 15: Regulatory information

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

| | |
|---|---|
| Directive 2004/42/EC on VOC in paints and varnishes: | 100 % |
| Information according to Directive 2012/18/EU (SEVESO III): | P5c FLAMMABLE LIQUIDS |

**National regulatory information**

| | |
|---|---|
| Employment restrictions: | Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. |

Water hazard class (D): 1 - slightly hazardous to water

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,5,6,7,9,10,11,12,14.

**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

**Relevant H and EUH statements (number and full text)**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation 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)