## 1. Identification

**Product identifier**

TIP TOP PRIMER PR 500-1

**Art.-No.**

525 2303, 525 2327, 525 2334, 525 2470, 525 2477

**Recommended use of the chemical and restrictions on use**

**Use of the substance/mixture**

Primer Coat

**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 phone number:** INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a) (USA domestic) 1 800 535 5053 or international (001) 352 323 3500 Infotrac/GBK GmbH-ID: 93591

## 2. Hazard(s) identification

**Classification of the chemical**

**29 CFR Part 1910.1200**

Flammable liquids: Flam. Liq. 2
Acute toxicity: Acute Tox. 4 (inhalation)
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Respiratory or skin sensitization: Skin Sens. 1
Germ cell mutagenicity: Muta. 2
Carcinogenicity: Carc. 2
Reproductive toxicity: Repr. 2
Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects) (respiratory tract irritation)
Specific target organ toxicity repeated or prolonged exposure: STOT RE 2
Hazardous to the aquatic environment: Aquatic Chronic 3

**Label elements**

**29 CFR Part 1910.1200**

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

Highly flammable liquid and vapor
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing genetic defects
Suspected of causing cancer
Suspected of damaging the unborn child
May cause respiratory irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
Harmful to aquatic life with long lasting effects

**Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.

**Special labelling of certain mixtures**

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**Hazards not otherwise classified**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
Vapours may form explosive mixture with air.

## 3. Composition/information on ingredients

**Mixtures**

**Chemical characterization**

Preparation with polymers in xylene and 4-methylpentan-2-one

**Hazardous components**

| CAS No | Components | Quantity |
|---|---|---|
| 108-10-1 | 4-Methylpentan-2-one | 60 - 65 % |
| | Reaction mass of ethylbenzene and xylene | 10 - 15 % |
| 13463-67-7 | titanium dioxide | 5 - 10 % |
| 9003-35-4 | phenol resin | 1 - 5 % |
| 108-95-2 | Phenol | 1 - 5 % |
| 108-88-3 | Toluene | 0,1 - 0,95 % |

**Further Information**

Note: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter < = 10 µm.

## 4. First-aid measures

**Description of first aid measures**

**General information**

Remove contaminated soaked clothing immediately.
Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48

hours.
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.
Seek medical treatment immediately.

**After contact with skin**

Wash off with soap and plenty of water.
Possible risk of resorption through skin.
If a person feels unwell or symptoms of skin irritation appear, consult a physician.

**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.
Rinse mouth.
Never give anything by mouth to an unconscious person.
Summon a doctor immediately.
Induce vomiting only upon the advice of a physician.

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

Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing genetic defects.
Suspected of causing cancer.
May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.
Suspected of damaging the unborn child.

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

Treat symptoms.
Attention. Beware of aspiration danger.

## 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**

Foam, carbon dioxide (CO2), dry chemical, water-spray.

**Unsuitable extinguishing media**

Full water jet.

**Specific hazards arising from the chemical**

Fire may produce:
carbon monoxide and carbon dioxide

**Special protective equipment and precautions for fire-fighters**

Wear self-contained breathing apparatus and 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**

Ensure adequate ventilation.
Keep away sources of ignition.
Keep away noninvolved persons.

**For non-emergency personnel**

Avoid contact with skin, eyes and clothing.
Do not breathe vapours.

**For emergency responders**

In case of vapour formation use respirator.
Use personal protective clothing.
Use only explosion-proof equipment.

**Environmental precautions**

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

**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.
Clean contaminated surface thoroughly.

**Other information**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.
Clean contaminated surface thoroughly.

**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**

Do not wear contact lenses when handling the product.
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.

**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.
Avoid contact with skin, eyes and clothing.
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:
strong oxidizing agents, strong acids and strong bases

**Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

## 8. Exposure controls/personal protection

**Control parameters**

**Exposure limits**

| CAS No | Substance | ppm | mg/m³ | f/cc | Category | Origin |
|---|---|---|---|---|---|---|
| 100-41-4 | Ethyl benzene | 100 | 435 | | TWA (8 h) | PEL |
| | | 100 | 435 | | TWA (8 h) | REL |
| | | 125 | 545 | | STEL (15 min) | REL |
| 100-41-4 | Ethyl benzene | 20 | | | TWA (8 h) | ACGIH-2024 |
| 108-10-1 | Hexone (Methyl isobutyl ketone) | 100 | 410 | | TWA (8 h) | PEL |
| 108-10-1 | Hexone | 50 | 205 | | TWA (8 h) | REL |
| | | 75 | 300 | | STEL (15 min) | REL |
| 108-95-2 | Phenol | 5 | 19 | | TWA (8 h) | PEL |
| | | 5 | 19 | | TWA (8 h) | REL |
| | | C 15.6 | C 60 | | 15 min | REL |
| 108-95-2 | Phenol | 5 | 19 | | TWA (8 h) | ACGIH-2024 |
| 13463-67-7 | Titanium dioxide Total dust | - | 15 | | TWA (8 h) | PEL |
| 13463-67-7 | Titanium dioxide: Finescale particles (Respirable particulate matter) | | 0.2 | | TWA (8 h) | ACGIH-2024 |
| 13463-67-7 | Titanium dioxide: Nanoscale particles (Respirable particulate matter) | | 0.2 | | TWA (8 h) | ACGIH-2024 |
| 13463-67-7 | Titanium dioxide | | | | as low as possible | REL |
| 108-88-3 | Toluene | 200 | - | | TWA (8 h) | PEL |
| | | C 300 | - | | Ceiling | PEL |
| | | 500 | - | | Peak (10 min) | PEL |
| 108-88-3 | Toluene | 100 | 375 | | TWA (8 h) | REL |
| | | 150 | 560 | | STEL (15 min) | REL |
| 108-88-3 | Toluene | 20 | - | | TWA (8 h) | ACGIH-2024 |
| - | Wood dusts (inhalable fraction): All other species/All other wood dusts | | 1 | | TWA (8 h) | ACGIH-2024 |
| 1330-20-7 | Xylene: mixed isomers | 20 | | | TWA (8 h) | ACGIH-2024 |
| 1330-20-7 | Xylenes (o-,m-,p-isomers) | 100 | 435 | | TWA (8 h) | PEL |
| 1314-13-2 | Zinc oxide (Dust) | - | 5 | | TWA (8 h) | REL |
| | | - | C 15 | | Ceiling | REL |
| 1314-13-2 | Zinc oxide (respirable fraction) | | 2 | | TWA (8 h) | ACGIH-2024 |
| | | | 10 | | STEL (15 min) | ACGIH-2024 |
| 1314-13-2 | Zinc oxide Respirable fraction | - | 5 | | TWA (8 h) | PEL |

**Biological Exposure Indices (BEI-ACGIH)**

| CAS No | Substance | Determinant | Value | Test material | Sampling time |
|---|---|---|---|---|---|
| 108-10-1 | METHYL ISOBUTYL KETONE | Methyl isobutyl ketone | 1 mg/L | urine | End of shift |
| 108-95-2 | PHENOL | Phenol (with hydrolysis, creatinine) | 250 mg/g | urine | End of shift |
| 108-88-3 | TOLUENE | Toluene | 0.02 mg/L | blood | Prior to last shift of workweek |

**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) > 240 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 |
| Color: | Grey |
| Odor: | Sweetish |

**Changes in the physical state**

| | |
|---|---|
| Melting point/freezing point: | n.d. |
| Boiling point or initial boiling point and boiling range: | 116 °C |
| Sublimation point: | n.a. |
| Softening point: | n.d. |
| Flash point: | 17 °C |

**Flammability**

| | |
|---|---|
| Solid/liquid: | n.a. |

**Explosive properties**

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

| | |
|---|---|
| Lower explosion limits: | n.d. |
| Upper explosion limits: | n.d. |
| Auto-ignition temperature: | n.d. |

**Self-ignition temperature**

| | |
|---|---|
| Solid: | n.a. |
| Gas: | n.a. |
| Decomposition temperature: | n.d. |
| pH-Value: | n.d. |
| Viscosity / dynamic: | n.d. |
| Viscosity / kinematic: (at 25 °C) | > 128 mm²/s |
| Flow time: | n.d. |
| Water solubility: | Slightly miscible |

**Solubility in other solvents**

n.d.

| | |
|---|---|
| Partition coefficient n-octanol/water: | n.d. |
| Vapor pressure: (at 20 °C) | n.d. |
| Density (at 20 °C): | 0,94 - 0,98 g/cm³ |
| Bulk density: | n.a. |

**Other information**

**Information with regard to physical hazard classes**

| | |
|---|---|
| Sustaining combustion: | Sustaining combustion |

Oxidizing properties

Not oxidising.

**Other safety characteristics**

| | |
|---|---|
| Solvent content: | 73 % |

**Further Information**

No data available.

## 10. Stability and reactivity

**Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stability: Stable

Stable under normal conditions.

**Possibility of hazardous reactions**

Hazardous reactions: Will not occur

Reactions with acids, alkalies and oxidizing 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**

Strong oxidizing agents
Strong acids and strong bases

**Hazardous decomposition products**

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

## 11. Toxicological information

**Route(s) of Entry**

Skin and eye contact, inhalation and ingestion.

**Information on toxicological effects**

**Acute toxicity**

Harmful if inhaled
No toxicological data available.
ATEmix/oral: ~ 61500 mg/kg
ATEmix/dermal: ~ 8200 mg/kg
ATEmix/inhalation: ~ 14 mg/l (vapour)

**ATEmix calculated**

ATE (oral) 1482 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 8,470 mg/l; ATE (inhalation dust/mist) 1,175 mg/l

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation
Serious eye damage/eye irritation: Causes serious eye irritation

**Sensitizing effects**

May cause an allergic skin reaction (phenol resin)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing genetic defects (Phenol)
Suspected of causing cancer (4-Methylpentan-2-one; titanium dioxide)
Suspected of damaging fertility or the unborn child (Toluene)

**Specific target organ toxicity (STOT) - single exposure**

May cause respiratory irritation (4-Methylpentan-2-one; Reaction mass of ethylbenzene and xylene)
May cause drowsiness or dizziness (4-Methylpentan-2-one)

**Specific target organ toxicity (STOT) - repeated exposure**

May cause damage to organs through prolonged or repeated exposure (Reaction mass of ethylbenzene and xylene; Xylene (mixed isomers); Phenol)

Carcinogenicity (IARC): Methyl isobutyl ketone (CAS 108-10-1) is listed in group 2B. Phenol (CAS 108-95-2) is listed in group 3. Toluene (CAS 108-88-3) is listed in group 3.

**Aspiration hazard**

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

**Additional information on tests**

This product is classified in accordance with the GHS regulations.

**Information on other hazards**

**Endocrine disrupting properties**

No data available

**Other information**

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.
Components of the product may be absorbed into the body through the skin.

## 12. Ecological information

**Ecotoxicity**

Ecological data are not available.
Harmful to aquatic life with long lasting effects.

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**Other adverse effects**

Hazardous water pollutant.

**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**

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

## 14. Transport information

**U.S. DOT 49 CFR 172.101**

| | |
|---|---|
| **UN number or ID number:** | UN 1133 |
| **Proper shipping name:** | Adhesives |
| **Transport hazard class(es):** | 3 |
| **Packing group:** | II |
| Hazard label: | 3 |

**Marine transport (IMDG)**

| | |
|---|---|
| **UN number or ID number:** | UN 1133 |
| **UN proper shipping name:** | Adhesives |
| **Transport hazard class(es):** | 3 |
| **Packing group:** | II |
| Hazard label: | 3 |

| | |
|---|---|
| Marine pollutant: | No |
| Limited quantity: | 5 L / 30 kg |
| Excepted quantity: | E2 |
| EmS: | F-E, S-D |

**Air transport (ICAO-TI/IATA-DGR)**

| | |
|---|---|
| **UN number or ID number:** | UN 1133 |
| **UN proper shipping name:** | Adhesives |
| **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

**Special precautions for user**

Handle in accordance with good industrial hygiene and safety practice.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

The transport takes place only in approved and appropriate packaging.

## 15. Regulatory information

**U.S. Regulations**

**National regulatory information**

SARA Section 302 Extremely hazardous substances:

Phenol (108-95-2): Reportable quantity = 1,000 lbs., Threshold planning quantity = 500/10,000 lbs.

SARA Section 304 CERCLA:

Methyl isobutyl ketone (108-10-1): Reportable quantity = 5,000 (2270) lbs. (kg)
Xylene (mixed isomers) (1330-20-7): Reportable quantity = 100 (45.4) lbs. (kg)
Phenol (108-95-2): Reportable quantity = 1,000 (454) lbs. (kg)
Toluene (108-88-3): Reportable quantity = 1,000 (454) lbs. (kg)
Ethylbenzene (100-41-4): Reportable quantity = 1,000 (454) lbs. (kg)

SARA Section 311/312 Hazards:

Methyl isobutyl ketone (108-10-1): Fire hazard, Delayed (chronic) health hazard, Immediate (acute) health hazard
Xylene (mixed isomers) (-): Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
titanium dioxide (13463-67-7): Delayed (chronic) health hazard
phenol resin (9003-35-4): Immediate (acute) health hazard
Phenol (108-95-2): Immediate (acute) health hazard, Delayed (chronic) health hazard
Toluene (108-88-3): Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA Section 313 Toxic release inventory:

Methyl isobutyl ketone (108-10-1): De minimis limit = 1.0 %, Reportable threshold = Standard
Xylene (mixed isomers) (1330-20-7): De minimis limit = 1.0 %, Reportable threshold = Standard
Phenol (108-95-2): De minimis limit = 1.0 %, Reportable threshold = Standard
Toluene (108-88-3): De minimis limit = 1.0 %, Reportable threshold = Standard
Ethylbenzene (100-41-4): De minimis limit = 0.1 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Methyl isobutyl ketone (108-10-1), Xylene (mixed isomers) (1330-20-7), Phenol (108-95-2), Toluene (108-88-3), Ethylbenzene (100-41-4)

**State Regulations**

**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

WARNING: This product can expose you to chemicals including Methyl isobutyl ketone (MIBK) (cancer, developmental); Toluene (developmental); Formaldehyde (gas) (cancer), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

## 16. Other information

**Hazardous Materials Identification System (HMIS)**

| | |
|---|---|
| Health: | *2 |
| Flammability: | 2 |
| Physical Hazard: | 0 |

**NFPA Hazard Ratings**

| | |
|---|---|
| Health: | 2 |
| Flammability: | 2 |
| Reactivity: | 0 |
| Unique Hazard: | |

**Changes**

| | |
|---|---|
| Revision date: | 29.11.2024 |
| Revision No: | 2,6 |

This data sheet contains changes from the previous version in section(s): 2,3,4,8,9,12.

**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

**Other data**

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions.
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)

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