

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 1 of 12

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

TIP TOP PRIMER PR 304

Art.-No.

525 4112, 525 4150

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

adhesive

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

number:

In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Highly flammable liquid and vapour.

Harmful in contact with skin.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

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.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Reaction mass of ethylbenzene and xylene

Butanone

Signal word: Danger

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 2 of 12

Pictograms:**Hazard statements**

| | |
|-----------|--|
| H225 | Highly flammable liquid and vapour. |
| H312+H332 | Harmful in contact with skin or if inhaled. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statements

| | |
|----------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe vapour. |
| 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. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P273 | Avoid release to the environment. |

2.3. Other hazards

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.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Preparation in organic solvents

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 3 of 12

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|---|--------------|------------------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| | Reaction mass of ethylbenzene and xylene | | | < 40 % |
| | | | 01-2119488216-32 | |
| | Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304 | | | |
| 78-93-3 | Butanone | | | < 30 % |
| | 201-159-0 | 606-002-00-3 | 01-2119457290-43 | |
| | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066 | | | |
| 1314-13-2 | Zinc oxide | | | < 2,5 % |
| | 215-222-5 | 030-013-00-7 | 01-2119463881-32 | |
| | Aquatic Acute 1, Aquatic Chronic 1; H400 H410 | | | |
| 108-88-3 | Toluene | | | < 1 % |
| | 203-625-9 | 601-021-00-3 | 01-2119471310-51 | |
| | Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304 | | | |
| 7779-90-0 | Trizinc bis(orthophosphate) | | | < 1 % |
| | 231-944-3 | 030-011-00-6 | 01-2119485044-40 | |
| | Aquatic Acute 1, Aquatic Chronic 1; H400 H410 | | | |

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.
- In the event of persistent symptoms receive medical treatment.
- Take away from danger area and lay down affected person.

After inhalation

- Move to fresh air in case of accidental inhalation of vapours.
- In the event of symptoms refer for medical treatment.

After contact with skin

- Wash off immediately 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.
- Seek medical treatment by eye specialist.

After ingestion

- Do not induce vomiting.
- Rinse out mouth and give plenty of water to drink.
- Never give anything by mouth to an unconscious person.
- Summon a doctor immediately.
- The decision whether to induce vomiting or not is to be taken by a physician.

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

- Harmful in contact with skin or if inhaled.
- Causes skin irritation.
- Causes serious eye irritation.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 4 of 12

May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

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

Foam, carbon dioxide (CO₂), dry chemical, 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
Chlorine compounds.

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

In case of vapour formation use respirator.
Use only explosion-proof equipment.
Ensure adequate ventilation.
Use personal protective clothing.
Keep away sources of ignition.

6.2. Environmental precautions

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

6.3. Methods and material for containment and 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.

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.
Provide sufficient air exchange and/or exhaust in work rooms.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

Do not smoke - volatile.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 5 of 12

Keep product and empty container away from heat and sources of ignition.

Pay attention to anti-explosion rules.

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.

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)

adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|------------|-----------------------------------|-----|-------------------|-----------|---------------|--------|
| 78-93-3 | Butan-2-one (methyl ethyl ketone) | 200 | 600 | | TWA (8 h) | WEL |
| | | 300 | 899 | | STEL (15 min) | WEL |
| 100-41-4 | Ethylbenzene | 100 | 441 | | TWA (8 h) | WEL |
| | | 125 | 552 | | STEL (15 min) | WEL |
| 1309-37-1 | Rouge, total inhalable | - | 10 | | TWA (8 h) | WEL |
| 13463-67-7 | Titanium dioxide, respirable | - | 4 | | TWA (8 h) | WEL |
| 108-88-3 | Toluene | 50 | 191 | | TWA (8 h) | WEL |
| | | 100 | 384 | | STEL (15 min) | WEL |
| 1330-20-7 | Xylene: mixed isomers | 50 | 220 | | TWA (8 h) | WEL |
| | | 100 | 441 | | STEL (15 min) | WEL |

Biological Monitoring Guidance Values (EH40)

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|---------|-------------|-------------|-----------|---------------|---------------|
| 78-93-3 | Butan-2-one | butan-2-one | 70 µmol/L | urine | Post shift |

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Pay attention to explosion protection guidelines.

Protective and hygiene measures

Do not inhale vapours.

Avoid contact with eyes and skin.

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 clothing before re-use.

Eye/face protection

Tightly fitting goggles (EN 166).

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 6 of 12

Eye wash bottle with pure water (EN 15154).

Hand protection

Splash protection:

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance (wear duration) > 30 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

Long sleeved clothing (DIN EN ISO 6530)

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: | Red |
| Odour: | Like ketone |

Test method

| | |
|-----------|------|
| pH-Value: | n.d. |
|-----------|------|

Changes in the physical state

| | |
|--|---------------|
| Melting point: | n.d. |
| Initial boiling point and boiling range: | approx. 80 °C |
| Sublimation point: | n.a. |
| Softening point: | n.d. |
| Flash point: | - 14 °C |

Flammability

| | |
|--------|------|
| Solid: | n.a. |
| Gas: | n.a. |

Explosive properties

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

| | |
|-------------------------|----------|
| Lower explosion limits: | 1 vol. % |
| Upper explosion limits: | n.d. |
| Ignition temperature: | > 460 °C |

Auto-ignition temperature

| | |
|--------|------|
| Solid: | n.a. |
| Gas: | n.a. |

| | |
|----------------------------|------|
| Decomposition temperature: | n.d. |
|----------------------------|------|

Oxidizing properties

Not oxidising.

| | |
|---------------------------------|------------------------|
| Vapour pressure: (at 20 °C) | approx. 101 hPa |
| Density (at 20 °C): | 1,02 g/cm ³ |
| Bulk density: | n.a. |
| Water solubility: (at 20 °C) | Partially miscible |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 7 of 12

Solubility in other solvents

n.d.

Partition coefficient: n.d.

Viscosity / dynamic: approx. 860 mPa·s

Viscosity / kinematic:
(at 40 °C) > 20,5 mm²/s

Flow time: n.d.

Vapour density: n.d.

Evaporation rate: n.d.

Solvent separation test: n.d.

Solvent content: < 70 %

9.2. Other information

No data available

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 oxidizing agents.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Vapours may form explosive mixture with air.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide
chlorine compounds

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful in contact with skin.

Harmful if inhaled.

No toxicological data available.

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (Reaction mass of ethylbenzene and xylene)

May cause drowsiness or dizziness. (Butanone)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 8 of 12

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Reaction mass of ethylbenzene and xylene)

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.

Practical experience

Other observations

Inhalation of vapours in high concentration can cause narcotic effects.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Inhalation of high vapour concentration 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.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Harmful to aquatic life with long lasting effects.

Xylene (mixed isomers)

LC50/Oncorhynchus mykiss/96 h = 2,6 mg/l

EC50/Daphnia magna/24 h = 1 mg/l [OECD 202]

EC50/Pseudokirchneriella subcapitata/72 h = 2,2 mg/l [OECD 201]

Zinc oxide

EC50/Selenastrum capricornutum/72 h = 0,17 mg/l

Butanone

LC50/Pimephales promelas/96 h = 2990 mg/l [OECD 203]

EC50/Daphnia magna/48 h = 308 mg/l [OECD 202]

EC50/Pseudokirchneriella subcapitata/72 h = 1972 mg/l [OECD 201]

Toluene

LC50/Carassius auratus/96 h = 13 mg/l

EC50/algae/72 h = 12,5 mg/l [OECD 201]

Trizinc bis(orthophosphate)

LC50/Fish/96 h < 5,1 mg/l

EC50/Daphnia magna/48 h < 1,7 mg/l

Ethyl benzene

ErC50/algae/96 h = 3,6 mg/l

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 9 of 12

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

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

Waste disposal number of waste from 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

Contaminated packagings are to be treated like the product itself.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|-----------|
| 14.1. UN number: | UN 1133 |
| 14.2. UN proper shipping name: | Adhesives |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | II |
| Hazard label: | 3 |



| | |
|--------------------------|-------------|
| Classification code: | F1 |
| Limited quantity: | 5 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: | UN 1133 |
| 14.2. UN proper shipping name: | Adhesives |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | II |
| Hazard label: | 3 |



| | |
|----------------------|-------------|
| Classification code: | F1 |
| Limited quantity: | 5 L / 30 kg |
| Excepted quantity: | E2 |

Marine transport (IMDG)

| | |
|-------------------------|---------|
| 14.1. UN number: | UN 1133 |
|-------------------------|---------|

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 10 of 12

14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. 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)

14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
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. Transport in bulk according to Annex II of Marpol and the IBC Code

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 48: Toluene

2004/42/EC (VOC): 60 - 65%
Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 11 of 12

Additional information

@00000000427

15.2. Chemical safety assessment

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

SECTION 16: Other information

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. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H312+H332 | Harmful in contact with skin or if inhaled. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| 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.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP PRIMER PR 304

Revision date: 08.05.2019

Product code: 00156-0211

Page 12 of 12

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

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