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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	e safety data sheet
Company name:	REMA TIP TOP AG
Street:	Gruber Strasse 63
Place:	D-85586 Poing
Telephone:	+49 (0) 8121 / 707 - 0
Responsible Department:	Responsible for the safety data sheet: sds@gbk-ingelheim.de
1.4. Emergency telephone number:	INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a) England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture according to 1272/2008/EC

Hazard categories: Flammable liquid: Flam. Liq. 2 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 - 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 or if inhaled. May cause respiratory irritation. Causes serious eye irritation. Causes skin 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

Hazard components for labelling

Xylene (mixed isomers) Butanone Ethyl benzene Signal word:

Pictograms:





Hazard statements

H225 H312+H332	Highly flammable liquid and vapour. Harmful in contact with skin or if inhaled.
H312+H332	Harmur in contact with skin or ir innaled.
H335	May cause respiratory irritation.
H319	Causes serious eye irritation.
H315	Causes skin irritation.

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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 state	ments
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/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

Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation in organic solvents

Hazardous components

CAS No	Chemical name			
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
1330-20-7	Xylene (mixed isomers)			< 35 %
	215-535-7	601-022-00-9	01-2119488216-32	
		I, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. H315 H319 H335 H373 H304	2, STOT SE 3, STOT RE 2, Asp.	
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			
100-41-4	Ethyl benzene	< 10 %		
	202-849-4	601-023-00-4	01-2119489370-35	
	Flam. Liq. 2, Acute Tox. 4	32 H373 H304		
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	·	
7779-90-0	Trizinc bis(orthophospha	te)		< 1 %
	231-944-3	030-011-00-6	01-2119485044-40	
	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, Ski H373 H304	n Irrit. 2, STOT SE 3, STOT RE 2, A	sp. Tox. 1; H225 H361d H315 H336	

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.

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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. 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.

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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. 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.

Advice on storage compatibility

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/m³	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
1		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
		-	-		STEL (15 min)	WEL
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	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

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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
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	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

Eye wash bottle with pure water (EN 15154). Tightly fitting goggles (EN 166).

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 (EN 368).

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
Changes in the physical state	
Initial boiling point and boiling range:	approx. 80 °C
Flash point:	- 14 °C
Lower explosion limits:	1 vol. %
Upper explosion limits:	
Ignition temperature:	> 460 °C
Vapour pressure:	approx. 101 hPa
(at 20 °C)	
Density (at 20 °C):	1,02 g/cm³
Water solubility:	Partially miscible
(at 20 °C)	
Viscosity / dynamic:	approx. 860 mPa·s
Viscosity / kinematic:	> 20,5 mm²/s
(at 40 °C)	
Solvent content:	< 70 %

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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 or if inhaled. No toxicological data available.

Irritation and corrosivity

Causes serious eye irritation. Causes skin irritation.

Sensitising effects

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

STOT-single exposure

May cause respiratory irritation. (Xylene (mixed isomers)) May cause drowsiness or dizziness. (Butanone), (Toluene)

Severe effects after repeated or prolonged exposure

May cause damage to organs through prolonged or repeated exposure. (Xylene (mixed isomers)), (Ethyl benzene), (Toluene)

Carcinogenic/mutagenic/toxic effects for reproduction

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.

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.

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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/Pseudokirchneriela 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/Pseudokirchneriela 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 Ethvl 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.

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 Classified as 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)

<u>14.1. UN number:</u>	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3

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14.4. Packing group:	II	
Hazard label:	3	
	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)		
<u>14.1. UN number:</u>	UN 1133	
14.2. UN proper shipping name:	Adhesives	
14.3. Transport hazard class(es):	3	
14.4. Packing group:		
Hazard label:	3	
	3	
Classification code:	F1	
Limited quantity:	5 L / 30 kg	
Excepted quantity:	E2	
Marine transport (IMDG)		
<u>14.1. UN number:</u>	UN 1133	
14.2. UN proper shipping name:	Adhesives	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	1	
Hazard label:		
Hazalu label.	3	
	3	
Marine pollutant:	No	
Limited quantity:	5 L / 30 kg	
Excepted quantity: EmS:	E2 F-E, S-D	
	г-е, 3-0	
Air transport (ICAO)		
<u>14.1. UN number:</u>	UN 1133	
14.2. UN proper shipping name:	Adhesives	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	II	
Hazard label:	3	
	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

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IATA-max. quantity - Cargo:	60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	no	
14.6. Special precautions for user		
Handle in accordance with good indus	strial hygiene and safety practice.	
	Annex II of MARPOL73/78 and the IBC Code	
The transport takes place only in appr	roved and appropriate packaging.	
SECTION 15: Regulatory informa		
15.1. Safety, health and environment	tal regulations/legislation specific for the substance or mixture	
EU regulatory information		
2004/42/EC (VOC):	60 - 65%	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juver work protection guideline' (94/33/EC). Observe employment restriction under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.	
Water contaminating class (D):	2 - water contaminating	
15.2. Chemical safety assessment	J.	
For this substance a chemical safety a	assessment has not been carried out.	
SECTION 16: Other information		
Abbreviations and acronyms		
	nsport international des marchandises Dangereuses par Route	
	port international ferroviaire de marchandises dangereuses	
ADN = Accord européen relatif au trar IMDG = International Maritime Code f	nsport international des marchandises dangereuses par voie de navigation intér for Dangerous Goods	ieure
	ort Association / International Civil Aviation Organization	
MARPOL = International Convention f	for the Prevention of Pollution from Ships	
	e Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk	
	d Toxic	
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.

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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.		

(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.)