Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1,1



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

1.1. Product identifier

TIP TOP COROPUR TEER 21

Art.-No.

580 0431, 580 0432, 580 1430, 580 1431

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

Use of the substance/mixture

Coating component

1.3. Details of the supplier of the safety data sheet

Company name:	TIP TOP Oberflaechenschutz Elbe GmbH
Street:	Heuweg 4
Place:	D-06886 Wittenberg
Telephone:	+49(0)3491/635-50
Telefax:	+49(0)3491/635-552
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. 3 Respiratory or skin sensitisation: Skin Sens. 1 Hazardous to the aquatic environment: Aquatic Chronic 2 Hazard Statements: Flammable liquid and vapour. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard components for labelling

Aromatic polyisocyanate Aromatic polyisocyanate 4-isocyanatosulphonyltoluene Signal word:

Pictograms:

Warning



Hazard statements

Hazaru statements	
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
Precautionary statem	nents
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapour.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

Revision date: 28.06.2016	Revision No: 1,1
Product code: 00359-1260	



	Take off contaminated clothing and wash it before reuse. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P391	Collect spillage.
P501	Dispose of contents/container to in accordance with local and national regulations.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aromatic polyisocyanate

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification according	to Regulation (EC) No. 1272/2008 [0	CLP]	
7440-66-6	Zinc powder - zinc dust	(pyrophoric)		10 - 12,5 %
	231-175-3	030-001-00-1	01-2119467174-37	
	Pyr. Sol. 1, Water-react. H250 H260 H400 H410	1, Aquatic Acute 1 (M-Factor = 1), A	quatic Chronic 1 (M-Factor = 1);	
103051-64-5	Aromatic polyisocyanate	9		5 - 10 %
	Skin Sens. 1; H317	•		
53317-61-6	Aromatic polyisocyanate	9		5 - 10 %
	Eye Irrit. 2, Skin Sens. 1	; H319 H317	•	
108-65-6	2-Methoxy-1-methylethy	l acetate		2,5 - 5 %
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3; H226	-		
1330-20-7	Xylene (mixed isomers)			2,5 - 5 %
	215-535-7	601-022-00-9	01-2119488216-32	
		4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2 H315 H319 H335 H373 H304	2, STOT SE 3, STOT RE 2, Asp.	
4083-64-1	4-isocyanatosulphonylto	0,5 - 1 %		
	223-810-8	615-012-00-7	01-2119980050-47	
	Skin Irrit. 2, Eye Irrit. 2,	Resp. Sens. 1, STOT SE 3; H315 H3	19 H334 H335 EUH014	
108-88-3	Toluene			0,5 - 1 %
	203-625-9	601-021-00-3	01-2119471310-51	
	Flam. Liq. 2, Repr. 2, Sł H373 H304	in 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.

If you feel unwell, seek medical advice.

Take away from danger area and lay down affected person.

In case of the person being unconscious put him/her in a stable side position.

Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1,1



After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products. Refer for medical treatment. If patient is not breathing, apply artificial respiration.

After contact with skin

Wash off with soap and plenty of water. Consult a doctor if skin irritation persists. Do not use solvents or thinners.

After contact with eyes

Remove contact lens.

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 out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Summon a doctor immediately. Induce vomiting only upon the advice of a physician.

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

May cause an allergic skin reaction. 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 (CO), carbon dioxide (CO2) and nitrogen oxides (NOx). Hydrogen cyanide (HCN) Isocyanates (NCO).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Cool containers at risk with water spray jet. The vapour/air mixture is explosive, even in empty, uncleaned receptacles. Vapours are heavier than air and spread along ground. 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.

Inform competent authority about release into the sewage, ground or into waters.

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).

Revision date: 28.06.2016 Revision No: 1,1 Product code: 00359-1260



Shovel into suitable container for disposal. Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Container should not be gas-tight closed.

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.

Keep a good ventilation and air-exhaust at the place of work. Vapours are heavier than air and spread along ground. Avoid contact with the skin and the eyes.

When using do not eat, drink or smoke.

Do not empty container under pressure. No pressure tank!

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

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.

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 protection rules. Protect from heat and direct solar radiation. Storage temperature between 15°C to 30°C

Advice on storage compatibility

Incompatible with: Oxidizing agents Acids and bases. Water, amines, alcohols

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Coating component

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
-	Isocyanates, all (as -NCO) Except methyl isocyanate	-	0.02		TWA (8 h)	WEL
		-	0.07		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

Revision date: 28.06.2016	Revision No: 1,1
Product code: 00359-1260	



Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
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.

Protective and hygiene measures

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 clothing before re-use.

Eye/face protection

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

Hand protection

Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove < Camatril Velours 730> 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

Light protective clothing

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

Bhysical state:		
Physical state:	Liquid	
Colour:	Various	
Odour:	characteristic	
Changes in the physical state		
Flash point:	30 °C	DIN 53213
Lower explosion limits:	2,6 vol. %	
Upper explosion limits:	8,0 vol. %	
Ignition temperature:	333 °C	
Vapour pressure:	0,43 hPa	
(at 20 °C)	-,	
Density (at 20 °C):	1,94 g/cm³	
Water solubility:	Immiscible	
(at 20 °C)		
Flow time:	200 s	4 DIN EN ISO 2431
(at 20 °C)		
Solvent separation test:	< 3 %	
Solvent content:	9 %	
9.2. Other information		
No data available.		

SECTION 10: Stability and reactivity

Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1,1



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 Reacts with: Water, amines, alcohols

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong oxidizing agents Strong acids and strong bases Water, amines, alcohols

10.6. Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx). Hydrogen cyanide gas, Isocyanates

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met. No toxicological data available.

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. (Aromatic polyisocyanate), (Aromatic polyisocyanate)

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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.

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 high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Inhalation of high concentrations may cause injuries to liver, kidneys and central nervous system.

A longer or repeated contact my lead to irritation of eyes and mucous membranes.

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

With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.

SECTION 12: Ecological information

12.1. Toxicity

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

Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1,1



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

Severe hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

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

Waste disposal number of waste from residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances Classified as 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)

<u>14.1. UN number:</u>	UN 1263
14.2. UN proper shipping name:	Paint
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3
Classification code:	F1
Limited quantity:	5 L / 30 kg
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	UN 1263
14.2. UN proper shipping name:	Paint
14.3. Transport hazard class(es):	3
14.4. Packing group:	III

Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1,1



Hazard label:	3
Classification code:	F1
Limited quantity:	5 L / 30 kg
Excepted quantity:	E1
Marine transport (IMDG)	
<u>14.1. UN number:</u>	UN 1263
14.2. UN proper shipping name:	Paint (Zinc powder - zinc dust (pyrophoric))
<u>14.3. Transport hazard class(es):</u>	3
14.4. Packing group:	III
Hazard label:	3
Marine pollutant:	Yes
Limited quantity:	5 L / 30 kg
Excepted quantity:	E1
EmS:	F-E, S-E
Air transport (ICAO)	
<u>14.1. UN number:</u>	UN 1263
14.2. UN proper shipping name:	Paint
<u>14.3. Transport hazard class(es):</u>	3
14.4. Packing group:	-
Hazard label:	3
	*
	3
Limited quantity Passenger:	10 L
Passenger LQ:	Y344
Excepted quantity:	E1
IATA-packing instructions - Passenger: IATA-max. quantity - Passenger:	355 60 L
IATA-max. quantity - rassenger. IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 L
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	yes

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

2004/42/EC (VOC):

179 g/l



Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1.1



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.
Water contaminating class (D):	3 - highly water contaminating

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. H250 Catches fire spontaneously if exposed to air. H260

- In contact with water releases flammable gases which may ignite spontaneously.
- May be fatal if swallowed and enters airways. H304
- Harmful in contact with skin. H312
- H315 Causes skin irritation.
- May cause an allergic skin reaction. H317
- Causes serious eye irritation. H319
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled .
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- May cause damage to organs through prolonged or repeated exposure. H373
- Verv toxic to aquatic life. H400
- Very toxic to aquatic life with long lasting effects. H410
- H411 Toxic to aquatic life with long lasting effects.
- EUH014 Reacts violently with water.

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

Revision date: 28.06.2016 Product code: 00359-1260 Revision No: 1,1



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.)