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

1.1. Product identifier

TIP TOP COROPUR ZINC M Art.-No. 580 0016, 580 0023, 580 0030

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 Acute 1 Hazard Statements: Flammable liquid and vapour. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label

Aromatic polyisocyanate 4-isocyanatosulphonyltoluene Polyaminoamide salt Aromatic polyisocyanate prepolymer Signal word:

Pictograms:





Hazard statements

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H410	Very 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.

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P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to in accordance with local and national regulations.

Special labelling of certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

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 Re	gulation (EC) No. 1272/2008 [C	LP]	
7440-66-6	zinc powder - zinc dust (stabil	ized)		50 - 100 %
	231-175-3	030-001-01-9	01-2119467174-37	
	Aquatic Acute 1, Aquatic Chro	onic 1; H400 H410		
64742-95-6	Solvent naphta (petroleum)			5 - 10 %
	918-668-5	649-356-00-4	01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STO H411 EUH066	DT SE 3, Asp. Tox. 1, Aquatic Cl	nronic 2; H226 H335 H336 H304	
53317-61-6	Aromatic polyisocyanate			2,5 - 5 %
	Eye Irrit. 2, Skin Sens. 1; H31	9 H317		
103051-64-5	Aromatic polyisocyanate			2,5 - 5 %
	Skin Sens. 1; H317			
108-65-6	2-Methoxy-1-methylethyl acet	2,5 - 5 %		
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3; H226			
1330-20-7	Xylene (mixed isomers)			1 - 2,5 %
	215-535-7	601-022-00-9	01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Ac Tox. 1; H226 H312 H332 H31		2, STOT SE 3, STOT RE 2, Asp.	
127821-00-5	5 Aromatic polyisocyanate prepolymer		1 - 2,5 %	
	Eye Irrit. 2, Skin Sens. 1; H31			
4083-64-1	4-isocyanatosulphonyltoluene		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 H37	9 H334 H335 EUH014	
	Polyaminoamide salt			< 0,5 %
	Skin Sens. 1; H317			

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

Further Information

According to note P to the regulation (EC) no. 1272/2008, "Solvent naphta (petroleum)" is not to be classified as "carcinogenic" or "mutagen" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

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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.

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).

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.

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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).

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.

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



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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
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
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

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:	Various
Odour:	characteristic

Changes in the physical state

Flash point:	39 °C	DIN 53213
Lower explosion limits:	2,7 vol. %	
Upper explosion limits:	10,8 vol. %	
Ignition temperature:	180 °C	
Vapour pressure: (at 20 °C)	0,56 hPa	

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2.6 g/cm³

Immiscible

500 - 700 mPa·s

> 20,5 mm²/s

15 %



Density (at 20 °C): Water solubility: (at 20 °C) Viscosity / dynamic: Viscosity / kinematic: (at 40 °C) Solvent content:

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 acids, alkalies and oxidizing agents

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

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), (Aromatic polyisocyanate prepolymer), (Polyaminoamide salt)

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.

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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.

Very toxic to aquatic life with long lasting effects.

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

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:	Ш
Hazard label:	3
Classification code:	F1
Limited quantity:	5 L / 30 kg
Excepted quantity:	E1

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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
<u>14.3. Transport hazard class(es):</u>	3
14.4. Packing group:	III
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 (Solvent naphtha (petroleum))
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3
Marine pollutant:	Yes
Limited quantity:	5 L / 30 kg
Excepted quantity: EmS:	E1
Air transport (ICAO)	F-E, S-E
<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:	
Hazard label:	3
Limited quantity Passenger:	10 L
Passenger LQ:	Y344
Excepted quantity:	E1
IATA-packing instructions - Passenger:	355
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	366 220 L
14.5. Environmental hazards	220 L
ENVIRONMENTALLY HAZARDOUS:	Ves
LIVINONWENTALLI HAZARDOUS.	yes



14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

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14.7. Transport in bulk according to Annex II of MARPOL73/78 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): < 20 % 398 g/l National regulatory information Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing. Water contaminating class (D): 2 - water contaminating Additional information Consider Chemical prohibition regulation.

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)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.
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.
H411	Toxic to aquatic life with long lasting effects.
EUH014	Reacts violently with water.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

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

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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.)