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

1.1. Product identifier

TIP TOP COROFLAKE 68 PRIMER

Art.-No.

590 0851, 590 1940

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

Use of the substance/mixture

Primer Coat

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 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

Indications of danger: Xn - Harmful, Xi - Irritant, N - Dangerous for the environment
R phrases:
Harmful by inhalation.
Irritating to eyes and skin.
Limited evidence of a carcinogenic effect.
May cause sensitisation by skin contact.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazard categories:
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory/skin sensitization: Skin Sens. 1
Carcinogenicity: Carc. 2
Specific target organ toxicity - repeated exposure: STOT RE 2
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Harmful if swallowed or if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label
Reaction product: bisphenol-F-epichlorine hydrine resins with average molecular weight <= 700
Furfuryl alcohol

Signal word:	Danger
Pictograms:	GHS07-GHS08-GHS09

Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapour.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P273	Avoid release to the environment.
P405	Store locked up.

Special labelling of certain mixtures

EUH205	Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Epoxy resin formulation, contains solvents

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
500-033-5	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	< 70 %
25068-38-6	Xi - Irritant, N - Dangerous for the environment R36/38-43-51-53	
603-074-00-8	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411	
01-2119456619-26		
202-626-1	Furfuryl alcohol	< 15 %
98-00-0	Carc. Cat. 3, T - Toxic, Xn - Harmful, Xi - Irritant R40-23-21/22-48/20-36/37	
603-018-00-2	Carc. 2, Acute Tox. 3, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, STOT RE 2; H351 H331 H302 H312 H319 H335 H373	
01-2119493965-18		
918-668-5	Solvent naphta (petroleum)	< 1 %
64742-95-6	Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R10-37-51-53-65-66-67	
649-356-00-4	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066	
01-2119455851-35		

Full text of R-, H- and EUH-phrases: 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.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Remove contaminated soaked clothing immediately.
Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours.
In the event of persistent symptoms receive medical treatment.

After inhalation
Move to fresh air in case of accidental inhalation of vapours or decomposition products.
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, for at least 15 minutes.
Seek medical treatment by eye specialist.

After ingestion
Induce vomiting only upon the advice of a physician.
Immediately give plenty of water (if possible charcoal slurry).
Never give anything by mouth to an unconscious person.
Summon a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed
Suspected of causing cancer.
Harmful if swallowed or if inhaled.
May cause damage to organs through prolonged or repeated exposure.
Causes skin irritation.
Causes serious eye irritation.
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 (CO_2), 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

5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective suit.

Additional information
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.
Ensure adequate ventilation.

Use personal protective clothing.
Remove persons to safety.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.
Do not discharge into the subsoil/soil.
Clean contaminated surface thoroughly.

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.

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.
Use only in thoroughly ventilated areas.
Do not breathe vapours.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

No special protective measures against fire required.

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.
Protect against direct sun radiation.

Advice on storage compatibility

Incompatible with:
Oxidizing agents, Amines, Acids and bases.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Primer Coat

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
98-00-0	Furfuryl alcohol (OLD)	-	-		TWA (8 h)	CHAN
		-	-		STEL (15 min)	CHAN

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.
Avoid contact with skin, eyes and clothing.
Remove and wash contaminated clothes before re-use.

Eye/face protection

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

Hand protection
Chemical protective gloves made of nitrile, nitrile/cotton, butyl or neoprene, with a minimum thickness of 0.7 mm, permeation time of approx. 480 minutes.
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.
Pls. find examples in the protective gloves database under: http://bestglove.com/site/chemrest/

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:	Yellowish	
Odour:	characteristic	
Flash point:	> 75 °C	
Lower explosion limits:	n.d.	
Density (at 20 °C):	1,13 - 1,15 g/cm³	
Water solubility: (at 20 °C)	Immiscible	
Ignition temperature:	> 300 °C	
Viscosity / dynamic: (at 25 °C)	275 - 375 mPa·s	
Flow time: (at 25 °C)	< 40 s	6 DIN/ISO 2431

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
Reactions with amines.

10.4. Conditions to avoid
To avoid thermal decomposition, do not overheat.
Protect against direct sun radiation.

10.5. Incompatible materials
Oxidizing agents, Amines, Acids and bases.

10.6. Hazardous decomposition products
Carbon monoxide and carbon dioxide.
Phenol

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed or if inhaled.
No toxicological data available.
ATEmix/oral: approx. 1300 mg/kg
ATEmix/dermal: > 2000 mg/kg
ATEmix/inhalation: approx. 6 mg/l/4h)

Irritation and corrosivity
Causes serious eye irritation.
Causes skin irritation.

Sensitising effects
May cause an allergic skin reaction. (Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700))

STOT-single exposure
Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure
May cause damage to organs through prolonged or repeated exposure. (Furfuryl alcohol)

Carcinogenic/mutagenic/toxic effects for reproduction
Suspected of causing cancer. (Furfuryl alcohol)

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

Practical experience

Observations relevant to classification
Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Other observations
Attention. Beware, danger of aspiration!

SECTION 12: Ecological information

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

12.2. Persistence and degradability
Not readily biodegradable.

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

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 dangerous 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.
Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Classification code:	M6
Limited quantity:	5 L / 30 kg
Transport category:	3
Hazard No:	90
Tunnel restriction code:	E

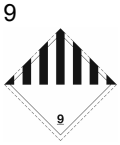
Inland waterways transport (ADN)

14.1. UN number:	UN3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Classification code:	M6
Limited quantity:	5 L / 30 kg

Marine transport (IMDG)

14.1. UN number:	UN3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9



Marine pollutant:	Yes
Limited quantity:	5 L / 30 kg
EmS:	F-A, S-F

Air transport (ICAO)

14.1. UN number:	UN3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es):	9

14.4. Packing group: III

Hazard label: 9

Limited quantity Passenger:	Y964 / 30 kg G
IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964
IATA-max. quantity - Cargo:	450 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 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

1999/13/EC (VOC): 0 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Additional information

Chemical prohibition regulation consider.

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

LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant R-phrases (Number and full text)

10	Flammable.
21/22	Harmful in contact with skin and if swallowed.
23	Toxic by inhalation.
36/37	Irritating to eyes and respiratory system.
36/38	Irritating to eyes and skin.
37	Irritating to respiratory system.
40	Limited evidence of a carcinogenic effect.
43	May cause sensitisation by skin contact.
48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
51	Toxic to aquatic organisms.
53	May cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Relevant H- and EUH-phrases (Number and full text)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
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.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH205	Contains epoxy constituents. 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 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.)