

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

### **1.1. Product identifier**

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#### **Art.-No.**

590 0648, 590 0923, 590 0924, 590 1070, 590 1700, 590 1710, 590 1750, 590 2560, 590 2880, 590 2969

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

#### **Use of the substance/mixture**

Coating material

### **1.3. Details of the supplier of the safety data sheet**

TIP TOP Oberflächenschutz Elbe GmbH

Heuweg 4

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** Emergency telephone :+49 (0) 6132 / 84463 (GBK GmbH, Ingelheim)  
**number:**

## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture**

Indications of danger: F - Highly flammable, Xi - Irritant, N - Dangerous for the environment

R phrases:

Highly flammable.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Vapours may cause drowsiness and dizziness.

#### **GHS classification**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory/skin sensitization: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Highly flammable liquid and vapour.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

### **2.2. Label elements**

**Pictograms:**

GHS02-GHS07-GHS09



**Signal word:**

Danger

**Hazardous components which must be listed on the label**

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

#### **Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - 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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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.

### Special labelling of certain mixtures

EUH205 Contains epoxy constituents. 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

Epoxy resin formulation, contains solvents

#### Hazardous components

| EC No            | Chemical name   | Quantity |
|------------------|---|----------|
| CAS No           | Classification  |          |
| Index No         | GHS classification  |          |
| REACH No         |   |          |
| 500-033-5        | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | < 60 %   |
| 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 |   |          |
| 205-500-4        | Ethyl acetate   | < 15 %   |
| 141-78-6         | F - Highly flammable, Xi - Irritant R11-36-66-67  |          |
| 607-022-00-5     | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336   |          |
| 01-2119475103-46 |   |          |
| 202-859-9        | Benzyl alcohol  | < 10 %   |
| 100-51-6         | Xn - Harmful R20/22   |          |
| 603-057-00-5     | Acute Tox. 4, Acute Tox. 4; H302 H332   |          |
| 01-2119492630-38 |   |          |
| 920-750-0        | Naphtha (petroleum) [Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes]                      | < 10 %   |
| 64742-49-0       | F - Highly flammable, Xn - Harmful, N - Dangerous for the environment<br>R11-51-53-65-66-67         |          |
|                  | Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411                        |          |
| 01-2119473851-33 |   |          |

Full text of R and H phrases: see Section 16.

### Further Information

According to note P to the regulation (EC) no. 1272/2008, "Naphtha (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.  
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.

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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**

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

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

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.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.

**Extinguishing media which must not be used for safety reasons**

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**

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.

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**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.

**6.2. Environmental precautions**

Clean contaminated surface thoroughly.  
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.

**6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).  
Information for disposal see section 13.

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

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**Advice on safe handling**

Keep container tightly closed.  
Use only in thoroughly ventilated areas.  
Avoid contact with skin, eyes and clothing.

**Advice on protection against fire and explosion**

Do not smoke - volatile.  
Keep away from open flames, hot surfaces and sources of ignition.  
The product is easy combustible.  
Take precautionary measures against static discharges.

**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 rules.  
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)**

Coating material

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure limits (EH40)**

| CAS No   | Substance     | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|----------|---------------|-----|-------------------|-----------|---------------|--------|
| 141-78-6 | Ethyl acetate | 200 | -                 |           | TWA (8 h)     | WEL    |
|          |               | 400 | -                 |           | STEL (15 min) | WEL    |

**8.2. Exposure controls**

**Occupational exposure 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.

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

**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/>

**Eye protection**

Tightly fitting goggles.  
Eye wash bottle with pure water.

**Skin protection**

Long sleeved clothing.

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## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

|                 |                |
|-----------------|----------------|
| Physical state: | Viscous liquid |
| Colour:         | Various        |
| Odour:          | Fruity         |

#### **Test method**

#### **Changes in the physical state**

|                                    |                       |
|------------------------------------|-----------------------|
| Flash point:                       | 2 °C                  |
| Lower explosion limits:            | n.d.                  |
| Upper explosion limits:            |                       |
| Ignition temperature:              | > 300 °C              |
| Density (at 20 °C):                | 1,25 g/cm³            |
| Water solubility:<br>(at 20 °C)    | Immiscible            |
| Viscosity / dynamic:<br>(at 25 °C) | 1100 - 1500 mPa·s     |
| Flow time:<br>(at 25 °C)           | > 44 s 6 DIN/ISO 2431 |

### **9.2. Other information**

No data available.

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## **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

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## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Acute toxicity**

No toxicological data available.

#### **Irritation and corrosivity**

Skin irritation: Irritant

Eye irritation: Irritant

#### **Sensitising effects**

May cause an allergic skin reaction.

#### **Severe effects after repeated or prolonged exposure**

STOT - Single exposure: Not classified.

STOT - Repeated exposure: Not classified.

Aspiration hazard: Not classified.

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

Carcinogenicity: Not classified.

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Mutagenicity: Not classified.  
Teratogenicity: Not classified.

**Additional information on tests**

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

**Empirical data on effects on humans**

Inhalation of vapours in high concentration can cause narcotic effects.  
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

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**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.

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**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.

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**SECTION 14: Transport information**

**Land transport (ADR/RID)**

|   |                |
|---|----------------|
| <b><u>14.1. UN number:</u></b>                  | UN1866         |
| <b><u>14.2. UN proper shipping name:</u></b>    | Resin solution |
| <b><u>14.3. Transport hazard class(es):</u></b> | 3              |
| <b><u>14.4. Packing group:</u></b>              | III            |
| Hazard label:                                   | 3              |



|                      |             |
|----------------------|-------------|
| Classification code: | F1          |
| Limited quantity:    | 5 L / 30 kg |
| Transport category:  | 3           |

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Hazard No: 33  
Tunnel restriction code: D/E

**Inland waterways transport (ADN)**

**14.1. UN number:** UN1866  
**14.2. UN proper shipping name:** Resin solution  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Limited quantity: 5 L / 30 kg

**Marine transport (IMDG)**

**14.1. UN number:** UN1866  
**14.2. UN proper shipping name:** Resin solution  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Limited quantity: 5 L / 30 kg  
EmS: F-E, S-E

**Other applicable information (marine transport)**

Receptacle max. 30 L, IMDG Code subsection 2.3.2.3

**Air transport (ICAO)**

**UN/ID number:** UN1866  
**14.2. UN proper shipping name:** Resin solution  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Limited quantity Passenger: Y344 / 10 L  
IATA-packing instructions - Passenger: 355  
IATA-max. quantity - Passenger: 30 L (\*)  
IATA-packing instructions - Cargo: 366  
IATA-max. quantity - Cargo: 30 L (\*)

**Other applicable information (air transport)**

\*) [3.3.3.1 IATA DGR]

**14.5. Environmental hazards**

Dangerous for the environment: 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.

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**SECTION 15: Regulatory information**

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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

1999/13/EC (VOC): 25 %; 300 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

**15.2. Chemical safety assessment**

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

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**SECTION 16: Other information**

**Full text of R phrases referred to under Sections 2 and 3**

11 Highly flammable.  
20/22 Harmful by inhalation and if swallowed.  
36 Irritating to eyes.  
36/38 Irritating to eyes and skin.  
43 May cause sensitisation by skin contact.  
51 Toxic to aquatic organisms.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
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.

**Full text of H statements referred to under Sections 2 and 3**

H225 Highly flammable liquid and vapour.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

**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)

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