

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

### 1.1. Product identifier

TIP TOP REMACOAT D-40-S POLY

#### Art.-No.

590 3092, 590 3102

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

#### Use of the substance/mixture

Coating system for protection against wear and corrosion

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

Company name: TIP TOP Oberflächenschutz 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:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Hazard components for labelling

Glyceryl poly(oxypropylene) triamine

Poly(oxy(methyl-1,2-ethanediyl)),alpha-(2-aminomethylethyl)omega-(2-aminomethylethoxy)-

6-Methyl-2,4-bis(methylthio)phenylene-1,3-diamine

4,4'-methylenebis[N-sec-butylaniline]

Signal word:

Danger

Pictograms:



#### Hazard statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): 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.

P310 Immediately call a POISON CENTER/doctor.

P273 Avoid release to the environment.

### 2.3. Other hazards

Not known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixture of organic amines

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64852-22-8	Glyceryl poly(oxypropylene) triamine			< 30 %
	Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3; H315 H318 H412			
9046-10-0	Poly(oxy(methyl-1,2-ethanediyl)),alpha-(2-aminomethylethyl)omega-(2-aminomethylethoxy)-			< 25 %
	Acute Tox. 4, Skin Corr. 1B, Aquatic Chronic 3; H302 H314 H412			
106264-79-3	6-Methyl-2,4-bis(methylthio)phenylene-1,3-diamine			< 20 %
	403-240-8	612-113-00-8	01-2119943036-42	
	Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H317 H400 H410			
5285-60-9	4,4'-methylenebis[N-sec-butylaniline]			< 10 %
	226-122-6			
	Acute Tox. 4; H302			
68479-98-1	Diethylmethylbenzenediamine			< 5 %
	270-877-4	612-130-00-0	01-2119486805-25	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, STOT RE 2, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1; H302 H312 H319 H373 H400 H410			

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.

Consult a physician.

Take away from danger area and lay down affected person.

#### 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

In case of contact with skin wash off immediately with plenty of water.

Consult a physician.

#### After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult (eye) doctor immediately.

#### 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**

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

**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 (CO<sub>2</sub>), 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 (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit.

**Additional information**

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

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.

Avoid contact with skin, eyes and clothing.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

**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.

Avoid contact with the skin and the eyes.

Do not breathe vapours.

Use only in thoroughly ventilated areas.

**Advice on protection against fire and explosion**

Keep away from heat and sources of ignition.

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.

### Advice on storage compatibility

Incompatible with acids.

### Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

### 7.3. Specific end use(s)

Coating system for protection against wear and corrosion

---

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

#### 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.

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 - viscous
Colour:	Various
Odour:	Amine like

### Changes in the physical state

Flash point:	> 100 °C
Lower explosion limits:	n.d.
Ignition temperature:	n.d.
Density (at 25 °C):	1,19 - 1,23 g/cm <sup>3</sup>
Water solubility:	Immiscible
Viscosity / dynamic: (at 25 °C)	1700 - 2000 mPa·s

### 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.

### **10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

### **10.5. Incompatible materials**

Acids.

### **10.6. Hazardous decomposition products**

Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).

---

## **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

Harmful if swallowed.

No toxicological data available.

#### **Irritation and corrosivity**

Causes severe skin burns and eye damage.

#### **Sensitising effects**

May cause an allergic skin reaction. (6-Methyl-2,4-bis(methylthio)phenylene-1,3-diamine)

#### **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 vapours in high concentration may cause irritation of respiratory system.

After single absorption, risk of blood damage (methaemoglobinaemia).

---

## **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**

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**

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**

Empty containers should be taken for local recycling, recovery or waste disposal.

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.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:** UN 2735  
**14.2. UN proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylene diamine)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Classification code: C7  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E1  
Transport category: 3  
Hazard No: 80  
Tunnel restriction code: E

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 2735  
**14.2. UN proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylene diamine)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Classification code: C7  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number:** UN 2735

**14.2. UN proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (polyoxypropylene diamine)

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** III

Hazard label: 8



Marine pollutant: Yes

Limited quantity: 5 L / 30 kg

Excepted quantity: E1

EmS: F-A, S-B

**Air transport (ICAO)**

**14.1. UN number:** UN 2735

**14.2. UN proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (polyoxypropylene diamine)

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** III

Hazard label: 8



Limited quantity Passenger: 1 L

Passenger LQ: Y841

Excepted quantity: E1

IATA-packing instructions - Passenger: 852

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 856

IATA-max. quantity - Cargo: 60 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**

2004/42/EC (VOC): 0 %

**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)

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

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.

H412 Harmful 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)

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