



## **1. Identification of the substance/preparation and of the company/undertaking**

### **Identification of the substance or preparation**

TIP TOP COROGARD 615 A

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

590 1049, 590 1094, 590 1100, 590 1111, 590 1190, 590 1290, 590 1610, 590 1630, 590 1660, 590 1670, 590 1680

#### **Use of the substance/preparation**

Coating material

### **Company/undertaking identification**

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Responsible Department

Emergency telephone :++49 (0) 6132 / 84463 (GBK Gefahrgut Buero GmbH, Ingelheim)

Responsible for the safety data sheet: sds@gbk-ingelheim.de

## **2. Hazards identification**

### **Classification**

Indications of danger : Highly flammable, Irritant, Dangerous for the environment

R-phrases:

Highly flammable.

Irritating to eyes and skin.

May cause sensitization by skin contact.

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

## **3. Composition/information on ingredients**

### **Chemical characterization ( Mixture )**

Epoxy resin formulation, contains solvents

### **Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
500-108-2	28064-14-4	Reaction product: bisphenol-F-epichlorine hydride resins with average molecular weight <= 700	< 75 %	Xi, N R36/38-43-51-53
203-550-1	108-10-1	4-Methylpentan-2-one	< 10 %	F, Xn, Xi R11-20-36/37-66

Full text of each relevant R phrase can be found in heading 16.

## **4. 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.

In the event of symptoms refer for medical treatment.



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**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.

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**5. Fire-fighting measures**

**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.

**Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases**

Fire may produce:

Carbon monoxide and carbon dioxide.

**Special protective equipment for fire-fighters**

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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**6. Accidental release measures**

**Personal precautions**

In case of vapour formation use respirator.

Ensure adequate ventilation.

Use personal protective clothing.

**Environmental precautions**

Clean contaminated surface thoroughly.

Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning up/taking up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

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**7. Handling and storage**

**Handling**

**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.

**Storage**

**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.

**8. Exposure controls/personal protection**

**Exposure limit values**

**Exposure limits (EH40)**

CAS-No.	Chemical name	ml/m <sup>3</sup>	mg/m <sup>3</sup>	F/ml	Category	Origin
108-10-1	4-Methylpentan-2-one	50	208		TWA (8 h)	WEL
	4-Methylpentan-2-one	100	416		STEL (15 min)	WEL

**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**

Eye wash bottle with pure water.  
Tightly fitting goggles.



### Skin protection

Long sleeved clothing.

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## 9. Physical and chemical properties

### General information

Physical state	Viscous liquid
Colour	Various
Odour	Like ketone

### Important health, safety and environmental information

Test method

#### Changes in the physical state

Flash point	17 °C
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#### Flammability

Lower explosion limits	n.d.
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Ignition temperature	n.d.
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Density (at 20 °C) :	1,1 - 1,2 g/cm <sup>3</sup>
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Water solubility :	Immiscible
at (20 °C)	

Viscosity / dynamic :	4300 - 5300 mPa·s
at (25 °C)	

Flow time :	> 40 s	6 DIN/ISO 2431
at (25 °C)		

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## 10. Stability and reactivity

### Conditions to avoid

To avoid thermal decomposition, do not overheat.

Protect against direct sun radiation.

### Materials to avoid

Oxidizing agents., Amines, Acids and bases.

### Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Phenol

### Additional information

No decomposition if stored and applied as directed.

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## 11. Toxicological information

### Empirical data on effects on humans

Sensitization through skin contact possible.

Irritating to eyes and skin.

Inhalation of vapours in high concentration can cause narcotic effects.

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## 12. Ecological information



#### Further information

Do not flush into surface water or sanitary sewer system.

Hazardous water pollutant.

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

Not readily biodegradable.

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### 13. Disposal considerations

#### 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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### 14. Transport information

#### Land transport (ADR/RID)

ADR/RID class	3
Classification code :	F1
Hazard-no.	33
UN number	1866
Hazard label	3
ADR/RID packing group	III
Limited quantity	LQ 7

#### Description of the goods

Resin solution

#### Other applicable information (land transport)

LQ 7: combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Tunnel restriction code: D/E

Transport category: 3

Additional label with symbol "fish and tree" according to subsection 5.2.1.8.3. ADR for single packagings and inner packagings with > 5 kg or 5 L, transition period ends 31.12.2010.

#### Inland waterways transport

#### Marine transport

IMDG code	3
UN number	1866
Marine pollutant	No
EmS	F-E; S-E
IMDG packing group	III
Limited quantity :	5 L / 30 kg
Hazard label	3



## Description of the goods

RESIN SOLUTION

### Other applicable information (marine transport)

Receptacle max. 30 L, IMDG Code subsection 2.3.2.3

Limited quantities (section 3.4): combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Additional label with symbol "fish and tree" according to subsection 5.2.1. IMDG Code for single packagings and inner packagings with > 5 kg or 5 L.

### Air transport

ICAO/IATA-DGR	3
UN/ID number	1866
Hazard label	3
IATA-packing instructions - Passenger	309
IATA-max. quantity - Passenger	30 L
IATA-packing instructions - Cargo	310
IATA-max. quantity - Cargo	30 L
ICAO packing group	III
Limited quantity Passenger	Y 309 / 10 L

## Description of the goods

RESIN SOLUTION

### Other applicable information (air transport)

\*) [3.3.3.1 IATA DGR]

## 15. Regulatory information

### Labelling

Additional advice on labelling According to EC-regulations the product is to be labelled as follows:

Indication of danger F - Highly flammable; Xi - Irritant; N - Dangerous for the environment

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

Reaction product: bisphenol-F-epichlorine hydrine resins with average molecular weight <= 700

### R phrases

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

### S phrases

16	Keep away from sources of ignition - No smoking.
28	After contact with skin, wash immediately with plenty of water and soap.
35	This material and its container must be disposed of in a safe way.
37/39	Wear suitable gloves and eye/face protection.
61	Avoid release to the environment. Refer to special instructions / Safety data sheets.

### Special labelling for certain preparations

Contains epoxy constituents. See information supplied by the manufacturer.

### 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
1999/13/EC (VOC)	< 9 %; < 106 g/l



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## **16. Other information**

### **Full text of R-phrases referred to under sections 2 and 3**

- |       |   |
|-------|---|
| 11    | Highly flammable.   |
| 20    | Harmful by inhalation.  |
| 36/37 | Irritating to eyes and respiratory system.  |
| 36/38 | Irritating to eyes and skin.  |
| 43    | May cause sensitization 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.                             |
| 66    | Repeated exposure may cause skin dryness or cracking.                                       |

### **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.)*