



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

Identification of the substance or preparation

TIP TOP COROGARD 615 B

Art.-No.:

590 1056

Use of the substance/preparation

Hardener

Company/undertaking identification

TIP TOP Oberflächenschutz Elbe GmbH

Heuweg 4

D-06886 Wittenberg

Telephone ++49(0)3491/635-50

Telefax ++49(0)3491/ 635-552

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, Corrosive

R-phrases :

Highly flammable.

Harmful by inhalation and if swallowed.

Causes burns.

May cause sensitization by skin contact.

Harmful 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
202-859-9	100-51-6	Benzyl alcohol	< 25 %	Xn R20/22
220-666-8	2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	< 25 %	Xn, C R21/22-34-43-52-53
271-846-8	68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	< 20 %	Xi R38-43
203-550-1	108-10-1	4-Methylpentan-2-one	< 15 %	F, Xn, Xi R11-20-36/37-66
246-672-0	25154-52-3	Nonylphenol	< 2 %	Repr. Cat. 3, Repr. Cat. 3, Xn, C, N R62-63-22-34-50-53
247-134-8	25620-58-0	Trimethylhexane-1,6-diamine	< 2 %	C, Xn, Xi R22-34-43-52-53

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.

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.

5. Fire-fighting measures

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), 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 (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).

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.

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.

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, Acids and bases.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

Storageclass (VCI)

3 A

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS-No.	Chemical name	ml/m ³	mg/m ³	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 glove 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.

9. Physical and chemical properties

General information

Physical state	Liquid
Colour	Pigmented
Odour	Like ketone

Important health, safety and environmental information

Test method

Changes in the physical state

Boiling point > 114 °C

Flash point 14 °C

Flammability

Lower explosion limits 1,2 vol. %

Upper explosion limits

Ignition temperature > 350 °C

Density (at 20 °C) : 1,29 - 1,38 g/cm³

Water solubility : Immiscible
at (20 °C)

Viscosity / dynamic : 4500 - 5500 mPa·s
at (25 °C)

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

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat.

Protect against direct sun radiation.

Materials to avoid

Oxidizing agents, Acids and bases.

Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)

Additional information

No decomposition if stored and applied as directed.

11. Toxicological information

Empirical data on effects on humans

The product causes burns of eyes, skin and mucous membranes.

Harmful by inhalation and if swallowed.

Sensitization through skin contact possible.

Danger of perforation of the gullet and of the stomach.



12. Ecological information

Further information

Do not flush into surface water or sanitary sewer system.

Hazard to waters

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

Not readily biodegradable.

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.

14. Transport information

Land transport (ADR/RID)

ADR/RID class	3
Classification code :	FC
Hazard-no.	338
UN number	2924
Hazard label	3 + 8
ADR/RID packing group	II
Limited quantity	LQ 4

Description of the goods

Flammable liquid, corrosive, n.o.s. (4-Methylpentan-2-one, 3-Aminomethyl-3,5,5-trimethylcyclohexylamine)

Other applicable information (land transport)

LQ 4: combination packaging: 3 l / 30 kg (total gross mass); trays: 1 l / 20 kg (total gross mass).

Tunnel restriction code: D/E

Transport category: 2

Inland waterways transport

Marine transport

IMDG code	3
UN number	2924
Marine pollutant	No
EmS	F-E; S-C
IMDG packing group	II



Limited quantity : 1 L / 30 kg

Hazard label 3 + 8

Description of the goods

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (4-methylpentan-2-one and isophorone diamine)

Other applicable information (marine transport)

Limited quantities (chapter 3.4): combination packaging: 1 l / 30 kg (total gross mass); trays: 1 l / 20 kg (total gross mass)

Air transport

ICAO/IATA-DGR	3
UN/ID number	2924
Hazard label	3 + 8
IATA-packing instructions - Passenger	305
IATA-max. quantity - Passenger	1 L
IATA-packing instructions - Cargo	307
IATA-max. quantity - Cargo	5 L
ICAO packing group	II
Limited quantity Passenger	Y305 / 0,5 L

Description of the goods

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (4-methylpentan-2-one and isophorone diamine, solution)

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; C - Corrosive

Hazardous component(s) to be indicated on label

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

3-Aminomethyl-3,5,5-trimethylcyclohexylamine

R phrases

11	Highly flammable.
20/22	Harmful by inhalation and if swallowed.
34	Causes burns.
43	May cause sensitization by skin contact.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

16	Keep away from sources of ignition - No smoking.
26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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.
36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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.
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Water contaminating class (D)	2 - water contaminating
1999/13/EC (VOC)	0 %

16. Other information

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

- | | |
|-------|---|
| 11 | Highly flammable. |
| 20 | Harmful by inhalation. |
| 20/22 | Harmful by inhalation and if swallowed. |
| 21/22 | Harmful in contact with skin and if swallowed. |
| 22 | Harmful if swallowed. |
| 34 | Causes burns. |
| 36/37 | Irritating to eyes and respiratory system. |
| 38 | Irritating to skin. |
| 43 | May cause sensitization by skin contact. |
| 50 | Very toxic to aquatic organisms. |
| 52 | Harmful to aquatic organisms. |
| 52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 53 | May cause long-term adverse effects in the aquatic environment. |
| 62 | Possible risk of impaired fertility. |
| 63 | Possible risk of harm to the unborn child. |
| 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)"

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