TIP TOP Oberflaechenschutz Elbe GmbH

Revision date: 11.11.2014 Revision No: 1,01

TIP TOP TOPLINE 505

00359-1119



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

1.1. Product identifier

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Art.-No.

590 0655, 590 0679

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

Use of the substance/mixture

Laminate 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 INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

<u>number:</u> England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24

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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: Flammable.

Harmful by inhalation and in contact with skin.

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.

GHS classification

Hazard categories:

Flammable liquid: Flam. Liq. 3 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

Specific target organ toxicity - repeated exposure: STOT RE 2 Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Flammable liquid and vapour.

Harmful in contact with skin or if inhaled.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

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-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

Xylene (mixed isomers)

Signal word: Warning

Pictograms: GHS02-GHS07-GHS08-GHS09

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Hazard statements

H226 Flammable liquid and vapour.

H312+H332 Harmful in contact with skin or if inhaled.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

P273 Avoid release to the environment.

P391 Collect spillage.

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)	< 90 %
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		
215-535-7	Xylene (mixed isomers)	< 15 %
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H312 H332 H315 H319 H335 H373 H304	
01-2119486136-34		
202-849-4	Ethyl benzene	< 5 %
100-41-4	F - Highly flammable, Xn - Harmful R11-20	
601-023-00-4	Flam. Liq. 2, Acute Tox. 4; H225 H332	
01-2119489370-35		\Box

Full text of R-, H- and EUH-phrases: see section 16.

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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.

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

Do not induce vomiting.

Rinse mouth.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

Attention. Beware, danger of aspiration.

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

Harmful in contact with skin or if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

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 (CO2), 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 and carbon dioxide

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

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.

6.2. Environmental precautions

Clean contaminated surface thoroughly.

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

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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).

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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.

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 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.

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)

Laminate coat

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

ļ	CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
	100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
Ì			125	552		STEL (15 min)	WEL
Ì	1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
			100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

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.

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Remove and wash contaminated clothes before re-use.

Eve/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/

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Skin protection

Long sleeved clothing (EN 368).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 141).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liauid Colour: Yellowish Odour: Aromatic

Flash point: approx. 25 °C

Lower explosion limits: n.d. Upper explosion limits: n.d. Vapour pressure: n.d.

(at 20 °C)

Density (at 20 °C): 1,08 - 1,14 g/cm³ Water solubility: **Immiscible**

(at 20 °C)

> 300 °C Ignition temperature:

240 - 320 mPa·s Viscosity / dynamic:

(at 25 °C)

Viscosity / kinematic: > 20,5 mm²/s

(at 40 °C)

Flow time: < 40 s 6 DIN/ISO 2431

(at 25 °C)

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.

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10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Phenol

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful in contact with skin or if inhaled.

No toxicological data available.

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. (Xylene (mixed isomers))

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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

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.

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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 assentiate and sealants are ather departure of the products.

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:UN 186614.2. UN proper shipping name:Resin solution

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Limited quantity: 5 L / 30 kg

Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

<u>14.1. UN number:</u> UN 1866

14.2. UN proper shipping name: Resin solution

14.3. Transport hazard class(es): 3
14.4. Packing group:

Hazard label: 3



Classification code: F1

Limited quantity: 5 L / 30 kg

Marine transport (IMDG)

14.1. UN number: UN 1866

14.2. UN proper shipping name: Resin solution (Epoxy resin)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



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

Air transport (ICAO)

<u>14.1. UN number:</u> UN 1866

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14.2. UN proper shipping name: Resin solution

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Limited quantity Passenger: Y344 / 10 L

IATA-packing instructions - Passenger:355IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:366IATA-max. quantity - Cargo:220 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): < 20 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment

restrictions for child bearing mothers and nursing.

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

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Relevant R-phrases (Number and full text)

10 Flammable.11 Highly flammable.20 Harmful by inhalation.

20/21 Harmful by inhalation and in contact with skin.

36/38 Irritating to eyes and skin.

38 Irritating to skin.

43 May cause sensitisation by skin contact.

51 Toxic to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

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

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H312+H332 Harmful in contact with skin or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

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.)