



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**TIP TOP COROFLAKE 60 COMP A RAL 7001 (SILVER GRAY)**

Revision date: 03.12.2019

Product code: 00359-1343

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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, 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 or 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.

**2.3. Other hazards**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

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**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)			< 55 %
	500-033-5	603-074-00-8	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
141-78-6	Ethyl acetate			< 15 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2, 3-epoxypropane and phenol			< 10 %
	500-006-8		01-2119454392-40	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			
100-51-6	Benzyl alcohol			< 10 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cycloalkanes			< 10 %
	920-750-0		01-2119473851-33	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411 EUH066			
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			< 5 %
	271-846-8	603-103-00-4	01-2119485289-22	
	Skin Irrit. 2, Skin Sens. 1; H315 H317			

Full text of H and EUH statements: 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

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.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### Suitable extinguishing media

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

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.

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

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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.

**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 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.

**Hints on joint storage**

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)**

Spray 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****Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

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**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.

**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 (DIN EN ISO 6530)

**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:	Viscous liquid
Colour:	Silver-grey
Odour:	Fruity

**Test method**

pH-Value:	n.d.
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**Changes in the physical state**

Melting point:	n.d.
Initial boiling point and boiling range:	n.d.
Sublimation point:	n.a.
Softening point:	n.d.
Flash point:	2 °C

**Flammability**

Solid:	n.a.
Gas:	n.a.

**Explosive properties**

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits:	n.d.
Upper explosion limits:	n.d.
Ignition temperature:	> 300 °C

**Auto-ignition temperature**

Solid:	n.a.
Gas:	n.a.
Decomposition temperature:	n.d.

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**Oxidizing properties**

Not oxidising.

Vapour pressure: n.d.

Density (at 20 °C): 1,25 g/cm<sup>3</sup>

Bulk density: n.a.

Water solubility:  
(at 20 °C) Immiscible**Solubility in other solvents**

n.d.

Partition coefficient: n.d.

Viscosity / dynamic:  
(at 25 °C) 1100 - 1500 mPa·sViscosity / kinematic:  
(at 40 °C) > 20,5 mm<sup>2</sup>/sFlow time:  
(at 25 °C) > 44 s 6 DIN/ISO 2431

Vapour density: n.d.

Evaporation rate: n.d.

Solvent separation test: n.d.

Solvent content: 25 %

**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.

**10.6. Hazardous decomposition products**

Carbon monoxide and carbon dioxide

phenol

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

No toxicological data available.

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**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

**Sensitising effects**

May cause an allergic skin reaction. (Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700) ; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)

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

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

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

**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****Disposal recommendations**

Can be incinerated, when in compliance with local regulations.  
Where possible recycling is preferred to disposal.

**List of Wastes Code - residues/unused products**

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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; 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 1866  
**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  
Excepted quantity: E1  
Transport category: 3  
Tunnel restriction code: E

#### Other applicable information (land transport)

Receptacle max. 450 L, ADR subsection 2.2.3.1.4

#### Inland waterways transport (ADN)

**14.1. UN number:** UN 1866  
**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  
Excepted quantity: E1

#### 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):** 3  
**14.4. Packing group:** III  
Hazard label: 3



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Marine pollutant: Yes  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E1  
EmS: F-E, S-E

**Other applicable information (marine transport)**

Receptacle max. 450 L, IMDG Code subsection 2.3.2.2

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 1866  
**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: 10 L  
Passenger LQ: Y344  
Excepted quantity: E1  
IATA-packing instructions - Passenger: 355  
IATA-max. quantity - Passenger: 30 L (\*)  
IATA-packing instructions - Cargo: 366  
IATA-max. quantity - Cargo: 100 L (\*)

**Other applicable information (air transport)**

\*) [3.3.3.1 IATA DGR]

**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 Marpol 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): 25 %; 300 g/l  
Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS  
Additional information: E2

**National regulatory information**

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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.

**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)**

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.
EUH066	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.)*