



according to Regulation (EC) No 1907/2006

TIP TOP COROFLAKE KTW-W Comp B

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

1.1. Product identifier

TIP TOP COROFLAKE KTW-W Comp B

Art.-No.

590 2231

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

Use of the substance/mixture

Coating

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 Department: 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)

number: In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

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

Reproductive toxicity: Repr. 2

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements: Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage. May cause an allergic skin reaction.

Suspected of damaging fertility.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with trimethylhexane-1,6-diamine

 $\hbox{3-Aminomethyl-3,5,5-trimethylcyclohexylamine}\\$

4-tert-butylphenol

Formaldehyde, oligomeric reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine and

4-tert-butylphenol

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine

Signal word: Danger





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Pictograms:









Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

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.

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.

P310 Immediately call a POISON CENTER/doctor.

P391 Collect spillage.

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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Hardener based on aliphatic polyamines



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Hazardous components

| CAS No | Chemical name | | | Quantity |
|-------------|---|--------------------------|------------------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | • | | |
| 153195-44-9 | 4,4'-Isopropylidenediphenol, oligom reaction products with trimethylhex | 2,3-epoxypropane, | < 25 % | |
| | 500-332-0 | | 01-2120781950-47 | |
| | Skin Corr. 1B, Eye Dam. 1, Aquatio H314 H318 H400 H410 | ronic 1 (M-Factor = 1); | | |
| 2855-13-2 | 3-Aminomethyl-3,5,5-trimethylcyclohexylamine | | | < 25 % |
| | 220-666-8 | 612-067-00-9 | 01-2119514687-32 | |
| | Acute Tox. 4, Acute Tox. 4, Skin Co H317 H412 | c 3; H312 H302 H314 | | |
| 98-54-4 | 4-tert-butylphenol | | | < 20 % |
| | 202-679-0 | 604-090-00-8 | 01-2119489419-21 | |
| | Repr. 2, Skin Irrit. 2, Eye Dam. 1, A | H410 | | |
| 111411-00-8 | Formaldehyde, oligomeric reaction and 4-tert-butylphenol | trimethylcyclohexylamine | < 15 % | |
| | 500-300-6 | | 01-2120781761-48 | |
| | Acute Tox. 4, Acute Tox. 4, Skin Co H317 H412 | c 3; H312 H302 H314 | | |
| 25513-64-8 | 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine | | | < 10 % |
| | 247-063-2 | | 01-2119569598-25 | |
| | Acute Tox. 4, Skin Corr. 1B, Skin S | 14 H317 H412 | | |

Full text of H and EUH statements: see section 16.

Further Information

SVHC substance [Regulation (EC) No 1907/2006, Article 57]

4-tert-butylphenol

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

Call a physician immediately.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.

If patient is not breathing, apply artificial respiration. In case of breathing difficulties give oxygen.

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.

Seek medical treatment immediately.

After contact with eyes

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

Remove contact lens.

Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.





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Never give anything by mouth to an unconscious person.

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 if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility.

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 (CO2), 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 (CO2) and nitrogen oxides (NOx)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and 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

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.

Clean contaminated surface thoroughly.

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.

Handle and open container with care.

Use only in thoroughly ventilated areas.

Avoid contact with skin, eyes and clothing.





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Advice on protection against fire and explosion

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.

Do not use zinc, aluminium or copper containers.

Hints on joint storage

Incompatible with:

Oxidizing agents

Acids and bases.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Coating

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

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
Colour: Ivory-coloured
Odour: Amine like

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: | > 100 °C | | | | | |
| Flammability | | | | | | |
| Solid: | n.a. | | | | | |
| Gas: | n.a. | | | | | |
| Explosive properties The product is not explosive. | | | | | | |
| Lower explosion limits: | n.d. | | | | | |
| Upper explosion limits: | n.d. | | | | | |
| Ignition temperature: | n.d. | | | | | |
| Auto-ignition temperature | | | | | | |
| Solid: Gas: | n.a. n.a. | | | | | |
| Decomposition temperature: | n.d. | | | | | |
| Oxidizing properties | n.u. | | | | | |
| Not oxidising. | | | | | | |
| Vapour pressure: | n.d. | | | | | |
| Density (at 20 °C): | 1,05 g/cm³ | | | | | |
| 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) | 6400 mPa·s | | | | | |
| Viscosity / kinematic: | n.d. | | | | | |
| Flow time: (at 25 °C) | n.d. | | | | | |
| Vapour density: | n.d. | | | | | |
| Evaporation rate: | n.d. | | | | | |
| Solvent separation test: | 0 % | | | | | |
| Solvent content: | 0 % | | | | | |
| 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.





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10.3. Possibility of hazardous reactions

Reactions with acids, alkalies and oxidizing agents

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Protect against direct sun radiation.

10.5. Incompatible materials

Oxidizing agents

Acids and bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed.

No toxicological data available.

ATEmix/oral: ~ 1800 mg/kg

ATEmix/dermal: > 5000 mg/kg

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (3-Aminomethyl-3,5,5-trimethylcyclohexylamine; Formaldehyde, oligomeric reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4-tert-butylphenol; 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. (4-tert-butylphenol)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: 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.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Very toxic to aquatic life with long lasting effects.

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine

LC50/Leuciscus idus melanotus/72 h = 174 mg/l

EC50/Scenedesmus subspicatus/72 h = 29,5 mg/l

3-Aminomethyl-3,5,5-trimethylcyclohexylamine

EC50/Daphnia magna/48 h = 23 mg/l

EbC50//Scenesdesmus subspicatus/72 h = 37 mg/l



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4-tert-butylphenol

LC50/Leuciscus idus/48 h = 1,6 mg/l

EbC50//Scenesdesmus subspicatus/48 h = 3,9 -6,7 mg/l

EC50/Pseudokirchneriela subcapitata/72 h = 14 - 22,7 mg/l

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

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

List of Wastes Code - 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;

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 2735

14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

(3-Aminomethyl-3,5,5-trimethylcyclohexylamine,

Trimethylhexane-1,6-diamine)

14.3. Transport hazard class(es):

14.4. Packing group:

Hazard label:

8

i lazalu label.



Classification code:



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Limited quantity: 1 L / 30 kg
Excepted quantity: E2
Transport category: 2
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.

(3-Aminomethyl-3,5,5-trimethylcyclohexylamine,

Trimethylhexane-1,6-diamine)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C7
Limited quantity: 1 L / 30 kg
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 2735

14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

((3-Aminomethyl-3,5,5-trimethylcyclohexylamine, Trimethylhexane-1,6-diamine, tert.-butylphenol)

 14.3. Transport hazard class(es):
 8

 14.4. Packing group:
 II

 Hazard label:
 8



Marine pollutant: Yes
Limited quantity: 1 L / 30 kg
Excepted quantity: E2
EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2735

14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

 $(3\hbox{-}Am inomethyl\hbox{-} 3,5,5\hbox{-}trimethyl cycloh exylamine,}\\$

Trimethylhexane-1,6-diamine)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Limited quantity Passenger: 0.5 L
Passenger LQ: Y840
Excepted quantity: E2





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IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

4-tert-butylphenol

2004/42/EC (VOC): 0

Information according to 2012/18/EU

(SEVESO III):

E1 Hazardous to the Aquatic Environment

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.

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



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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. |
| H361f | Suspected of damaging fertility. |
| H400 | Very toxic to aquatic life. |
| H410 | Very 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.)