REMA TIP TOP GmbH Revision date: 28.06.2010 **TIP TOP COROPUR ALU** 00156-0350

Revision no.: 1,00



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

Identification of the substance or preparation

TIP TOP COROPUR ALU

Art.-No.: 580 0669

Use of the substance/preparation

Coating component

Company/undertaking identification

REMA TIP TOP GmbH Gruber Straße 63 D-85586 Poing Telephone : ++49 (0) 81

++49 (0) 8121 / 707 - 0

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 : Harmful R-phrases: Flammable. Harmful by inhalation and in contact with skin. May cause sensitization by inhalation. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients

Chemical characterization (Mixture) Aromatic polyisocyanate

Hazardous components

| EC-No. | CAS-No. | Chemical name | Quantity | Classification |
|-----------|------------|-----------------------------------|-------------|---|
| 215-535-7 | 1330-20-7 | Xylene (mixed isomers) | 12,5 - 20 % | Xn, Xi R10-20/21-38 |
| 203-603-9 | 108-65-6 | 2-Methoxy-1-methylethyl acetate | 12,5 - 20 % | R10 |
| 265-199-0 | 64742-95-6 | Solvent naphta (petroleum) | 5 - 10 % | Xn, Xi, N R10-37-51-53-65-66-67 |
| 265-191-7 | 64742-88-7 | Solvent naphta (petroleum) | 5 - 10 % | Xn R10-65 |
| 209-544-5 | 584-84-9 | 4-Methyl-m-phenylene diisocyanate | < 0,5 % | Carc. Cat. 3, T+, Xi R40-26-36/37/38-42/43-52-53 |

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

Further Information

According to note P to the regulation (EC) no. 1272/2008, "Solvent naphta (petroleum)" is not to be classified as "carcinogenic" or "mutagen" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

4. First aid measures

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General information

Remove contaminated soaked clothing immediately. If you feel unwell, seek medical advice. Take away from danger area and lay down affected person. In case of the person being unconscious put him/her in a stable side position.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products. Refer for medical treatment.

If patient is not breathing, apply artificial respiration.

After contact with skin

Wash off with soap and plenty of water. Consult a doctor if skin irritation persists. Do not use solvents or thinners.

After contact with eyes

Remove contact lens. 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 out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Summon a doctor immediately. Induce vomiting only upon the advice of a physician.

Advice to doctor

Attention. Beware, danger of aspiration.

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 (NOx). Hydrogen cyanide (HCN) Isocyanates (NCO).

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

Additional information

Cool containers at risk with water spray jet. The vapour/air mixture is explosive, even in empty, uncleaned receptacles. Vapours are heavier than air and spread along ground. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures

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Personal precautions

In case of vapour formation use respirator. Use only explosion-proof equipment. Ensure adequate ventilation. Use personal protective clothing. Keep away sources of ignition.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Inform competent authority about release into the sewerage, ground or into waters.

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.

Additional information

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Container should not be gas-tight closed.

7. Handling and storage

<u>Handling</u>

Advice on safe handling

Keep container tightly closed. Keep a good ventilation and air-exhaust at the place of work. Vapours are heavier than air and spread along ground. Avoid contact with the skin and the eyes. When using, do not eat, drink or smoke. Do not empty container under pressure. No pressure tank! Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition. Do not smoke. Take precautionary measures against static discharges. Use only explosion-proof equipment.

Storage

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place. Pay attention to anti-explosion protection rules. Protect from heat and direct solar radiation. Storage temperature between 15°C to 30°C

Advice on storage compatibility

Incompatible with: Oxidizing agents. Acids and bases. Water, amines, alcohols

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/personal protection

Exposure limit values

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Exposure limits (EH40)

| CAS-No. | Chemical name | ml/m³ | mg/m³ | F/ml | Category | Origin |
|-----------|-------------------------------------|-------|-------|------|---------------|--------|
| 108-65-6 | 1-Methoxypropyl acetate | 50 | 274 | | TWA (8 h) | WEL |
| | | 100 | 548 | | STEL (15 min) | WEL |
| 1330-20-7 | Xylene, o-, m-, p- or mixed isomers | 50 | 220 | | TWA (8 h) | WEL |
| | | 100 | 441 | | STEL (15 min) | WEL |

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.

Treat subsequently with skin cream.

Remove and wash contaminated clothing before re-use.

Respiratory protection

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

Hand protection

Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove < Camatril Velours 730> made by www.kcl.de.

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.

Eye protection

Tightly fitting goggles. Eye wash bottle with pure water.

Skin protection

Long sleeved clothing.

9. Physical and chemical properties

General information

| Physical state : | Liquid |
|------------------|----------------|
| Colour : | Various |
| Odour : | Characteristic |

Important health, safety and environmental information

| Changes in the physical state | | |
|----------------------------------|-------------|-------------------|
| Flash point : | 30 °C | DIN 53213 |
| Lower explosion limits : | 1,5 vol. % | |
| Upper explosion limits : | 10,8 vol. % | |
| Vapour pressure: (at 20 °C) | 2,85 hPa | |
| Density (at 20 °C) : | 1,09 g/cm³ | |
| Water solubility : (at 20 °C) | Immiscible | |
| Flow time : (at 20 °C) | 80 s | 6 DIN EN ISO 2431 |

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235 °C



Solvent separation test

< 3 %

Solvent content 45 %

Other information

Ignition temperature :

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat. Heating can release vapours which can be ignited. Vapour/air-mixtures are explosive at intense warming.

Materials to avoid

Strong oxidizing agents. Strong acids and strong bases. Water, amines, alcohols

Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx). Hydrogen cyanide gas., Isocyanates

Additional information

No decomposition if stored and applied as directed.

11. Toxicological information

Empirical data on effects on humans

Harmful by inhalation and in contact with skin.

May cause sensitization by inhalation.

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Inhalation of high concentrations may cause injuries to liver, kidneys and central nervous system.

A longer or repeated contact my lead to irritation of eyes and mucous membranes.

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

With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.

Further information

No toxicological data available. Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EG.

12. Ecological information

Further information

Do not flush into surface water or sanitary sewer system.

Hazardous water pollutant.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Ecological data are not available.

13. Disposal considerations

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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 080111 WASTES FROM THE MANUFACTURE. FORMULATION, SUF

WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances Classified as hazardous waste.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal. 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)

| UN number : | 1263 |
|-------------------------|------|
| ADR/RID class : | 3 |
| Classification code : | F1 |
| Warning plate | |
| Hazard-no. : | 33 |
| Hazard label : | 3 |
| ADR/RID packing group : | III |
| Limited quantity : | LQ 7 |
| Description of the mode | |

Description of the goods Paint

Other applicable information (land transport)

Viscous substance - excepted quantity if in containers with a capacity up to 450 I (subsection 2.2.3.1.5 ADR).

1263

3

3

Ш

F-E; S-E

5 L / 30 kg

Tunnel restriction code: D/E Transport category: 3

Marine transport UN number : IMDG code : Hazard label : IMDG packing group : EmS :

Limited quantity : Description of the goods

PAINT

Other applicable information (marine transport)

Viscous substance - excepted quantity if in containers with a capacity up to 30 I (subsection 2.3.2.5 IMDG Code).

| Air transport | |
|-----------------|------|
| UN/ID number : | 1263 |
| ICAO/IATA-DGR : | 3 |

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| TIP TOP COROPUR ALU | |
|---|-------------|
| 00156-0350 | |
| Hazard label : | 3 |
| ICAO packing group : | 111 |
| Limited quantity Passenger : | Y309 / 10 L |
| IATA-packing instructions - Passenger : | 309 |
| IATA-max. quantity - Passenger : | 60 L |
| IATA-packing instructions - Cargo : | 310 |
| IATA-max. quantity - Cargo : | 220 L |
| Description of the goods | |
| PAINT | |

15. Regulatory information

Labelling

Additional advice on labelling

According to EEC-regulations the product is to be labelled as follows:

Danger symbols :

Xn - Harmful



Xn - Harmful

Hazardous components which must be listed on the label 4-Methyl-m-phenylene diisocyanate Xylene (mixed isomers)

R phrases

| It pinuses | | |
|---------------------------|---|--|
| 10 | Flammable. | |
| 20/21 | Harmful by inhalation and in contact with skin. | |
| 42 | May cause sensitization by inhalation. | |
| 52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | |
| S phrases | | |
| 23 | Do not breathe vapour. | |
| 38 | In case of insufficient ventilation, wear suitable respiratory equipment. | |
| 45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). | |
| 51 | Use only in well-ventilated areas. | |
| 61 | Avoid release to the environment. Refer to special instructions / Safety data sheets. | |
| 36/37 | Wear suitable protective clothing and gloves. | |
| | Iling for certain preparations cyanates. See information supplied by the manufacturer. | |
| EU regulatory information | | |

1999/13/EC (VOC) :

495 g/l

National regulatory information

| Employment restrictions : | Observe employment restrictions for young people. Observe |
|--------------------------------|--|
| | employment restrictions for child bearing mothers and nursing. |
| Water contaminating class (D): | water contaminating |

16. Other information

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| Full text o | f R-phrases referred to under sections 2 and 3 |
|-------------|--|
| 10 | Flammable. |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 26 | Very toxic by inhalation. |
| 36/37/38 | Irritating to eyes, respiratory system and skin. |
| 37 | Irritating to respiratory system. |
| 38 | Irritating to skin. |
| 40 | Limited evidence of a carcinogenic effect. |
| 42 | May cause sensitization by inhalation. |
| 42/43 | May cause sensitization by inhalation and skin contact. |
| 51 | 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. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |
| 67 | Vapours may cause drowsiness and dizziness. |
| Eurthor In | formation |

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.)