

Printing date 02.10.2011 Revision: 02.10.2011 Version number 30

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

Product identifier

Article number: EN 1100 ANTICHIP UNDERBODY COATING Relevant identified uses of the substance or mixture and uses advised against Sector of Use SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Product category PC9a Coatings and paints, thinners, paint removers Process category PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) Environmental release category ERC2 Formulation of preparations Article category AC1 Vehicles Application of the substance / the preparation Sealant Surface protection

Details of the supplier of the safety data sheet Manufacturer/Supplier: EN CHEMICALS S.A 57,009 KALOCHORI THESSALONIKI, GREECE Ph: +30 2310 755 428 email: sales@enchemicals.com

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2 Hazards identification

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

GHS08 health hazard

| Repr. 2 | H361d Suspected of damaging the unborn child. |
|-----------------------|--|
| STOT RE 2 | H373 May cause damage to organs through prolonged or repeated exposure. |
| Asp. Tox. 1 | H304 May be fatal if swallowed and enters airways. |
| GHS0 Skin Irrit. 2 |)7 H315 Causes skin irritation. |
| Aquatic Chronic | 3 H412 Harmful to aquatic life with long lasting effects. |
| Classification ac | cording to Directive 67/548/EEC or Directive 1999/45/EC |
| Xn; Harm | ful |
| R48/20-63-65: | Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed. |
| Xi; Irritan | t |
| R38: | Irritating to skin. |

*

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| R11: | Highly flam | mable. | |
|---|--|---|-----------------------------------|
| In the gas v Keep away The produc preparation <i>Classificatio</i> The classif | Vapours ma concerning partic olume of sealed p fire and ignition s at has to be label s of the EU" in the m system: ication is accord | aquatic organisms, may cause long-term adverse effects in the aquatic environment by cause drowsiness and dizziness. <i>cular hazards for human and environment:</i> backages vapours of flammable solvents, especially at action of heat, may ac sources. Iled due to the calculation procedure of the "General Classification gui be latest valid version. ling to the latest editions of the EU-lists addapting Directive 67/548/EI labelling of dangerous substances and extended by company and literature | cumulate deline fo EC on th |
| Label eleme | nts | | |
| | <i>cording to EU gu</i> ct has been class | <i>idelines:</i> sified and marked in accordance with EU Directives / Ordinance on F | lazardou |
| Xn Harmfu | <i>and hazard design</i> d l lammable | ation of product: | |
| <i>Hazard-dete</i> toluene | rmining compone | ents of labelling: | |
| 48/20 Harm 52/53 Harm 63 Possil 65 Harm 67 Vapor | y flammable. ful: danger of ser ful to aquatic org ole risk of harm to ful: may cause lu | rious damage to health by prolonged exposure through inhalation. ganisms, may cause long-term adverse effects in the aquatic environment. o the unborn child. ng damage if swallowed. owsiness and dizziness. | |
| 16 Keep 23 Do no 25 Avoid 36/37 Wear 51 Use of 61 Avoid <i>Other hazar</i> | container tightly away from source t breathe gas/fum contact with eyes suitable protectiv ily in well-ventila release to the env ds BT and vPvB asse oplicable. | ve clothing and gloves. Ited areas. vironment. Refer to special instructions/safety data sheets. | |
| | ppileable. | | |
| Chemical cl | t <mark>/information on i</mark> naracterization: M Mixture of hazar | lixtures | |
| - | components: | iuvus substailuts | |
| CAS: 123-8 EINECS: 20 | 6-4 | n-butyl acetate R10-66-67 | 10-15% |
| | er: 607-025-00-1 | 🚸 Flam. Liq. 3, H226; 🕂 STOT SE 3, H336 | |

| CAS: 110-54-3 | n-hexane | of page 10-15% |
|--|--|-----------------------|
| EINECS: 203-777-6 Index number: 601-037-00-0 | 🗙 Xn R48/20-62-65; 🗙 Xi R38; 🎒 F R11; 🌄 N R51/53 R67 | |
| | Repr. Cat. 3 ♦ Flam. Liq. 2, H225; ♦ Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; STOT SE 3, H336 | |
| CAS: 108-88-3 EINECS: 203-625-9 Index number: 601-021-00-3 | toluene X n R48/20-63-65; X Xi R38; F R11 R67 Repr. Cat. 3 | 5-9% |
| | Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336 | |
| CAS: 68131-99-7 | polymer R18 | < 2.5% |
| CAS: 95-63-6 EINECS: 202-436-9 Index number: 601-043-00-3 | 1,2,4-trimethylbenzene X NR20; X IR36/37/38; NR51/53 R10 | < 2.5% |
| | ♦ Flam. Liq. 3, H226; ♦ Aquatic Chronic 2, H411; ♦ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | - |
| CAS: 108-67-8 EINECS: 203-604-4 Index number: 601-025-00-5 | mesitylene X IR 37; 🐝 NR51/53 R10 | < 2.5% |
| | ♦ Flam. Liq. 3, H226; ♦ Aquatic Chronic 2, H411; ♦ STOT SE 3, H335 | |
| CAS: 98-82-8 EINECS: 202-704-5 Index number: 601-024-00-X | | < 2.5% |
| | ♦ Flam. Liq. 3, H226; ♦ Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ↑ STOT SE 3, H335 | |
| CAS: 103-65-1 EINECS: 203-132-9 Index number: 601-024-00-X | propylbenzene Xn R65; Xi R37; N R51/53 R10 | < 2.5% |
| | ♦ Flam. Liq. 3, H226; ♦ Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ♦ STOT SE 3, H335 | |

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water. For safety reasons unsuitable extinguishing agents: Water with full jet Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

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Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water. *Methods and material for containment and cleaning up:* Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents *Reference to other sections* See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Information about fire - and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities Storage: Requirements to be met by storerooms and receptacles: Store in a cool location. Information about storage in one common storage facility: Not required. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm

Long-term value: 724 mg/m³, 150 ppm

110-54-3 n-hexane

WEL Long-term value: 72 mg/m³, 20 ppm

108-88-3 toluene

WEL Short-term value: 384 mg/m³, 100 ppm Long-term value: 191 mg/m³, 50 ppm Sk

Additional information: The lists valid during the making were used as basis.

Exposure controls Personal protective equipment: General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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Material of gloves

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The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. *Penetration time of glove material*

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

| Information on basic physical | and chemical properties |
|----------------------------------|--|
| General Information | |
| Appearance: | |
| Form: | Fluid |
| Colour: | According to product specification |
| Odour: | Characteristic |
| Change in condition | |
| Melting point/Melting range | 2. Undetermined |
| Boiling point/Boiling range | |
| | |
| Flash point: | -26°C |
| Autoignition temperature: | 370°C |
| Self-igniting: | Product is not selfigniting. |
| Danger of explosion: | Risk of explosion by shock, friction, fire or other sources of ignition. |
| Explosion limits: | |
| Lower: | 1.2 Vol % |
| Upper: | 7.5 Vol % |
| Vapour pressure at 20°C: | 29 hPa |
| Density at 20°C: | 1.276 g/cm ³ |
| Solubility in / Miscibility with | |
| water: | Not miscible or difficult to mix. |
| | |
| Solvent content: | 22.2.0/ |
| Organic solvents: | 23.3 % |
| Water: | 0.1 % |
| VOC (EC) | 459.2 g/l |
| Solids content (volume): | 76.6 % |
| | |

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. *Possibility of hazardous reactions* No dangerous reactions known.

Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

| Informatio Acute toxic | | ological effects |
|--|------------------|--|
| LD/LC50 v | , alues relev | ant for classification: |
| 123-86-4 n | -butyl acet | ate |
| Oral | LD50 | 13100 mg/kg (rat) |
| Dermal | LD50 | >5000 mg/kg (rabbit) |
| Inhalative | LC50/4 h | >21.0 mg/l (rat) |
| 108-88-3 to | oluene | |
| Oral | LD50 | 5000 mg/kg (rat) |
| Dermal | LD50 | 12124 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 5320 mg/l (mouse) |
| Primary ir on the skin on the eye: | : No irrita | nt effect. |
| • | | sitizing effects known. |
| | | cal information: |
| | | he following dangers according to the calculation method of the General EU Classification rations as issued in the latest version: |

12 Ecological information

Toxicity

Acquatic toxicity: No further relevant information available. Ecotoxical effects: Remark: Harmful to fish Additional ecological information: General notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

13 Disposal considerations

Waste treatment methods Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging: Recommendation: Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border)



| ADR/RID class: | 3 (F1) Flammable liquids. |
|-------------------------|---------------------------|
| Danger code (Kemler): | 33 |
| UN-Number: | 1263 |
| Packaging group: | II |
| Hazard label: | 3 |
| UN proper shipping name | e: 1263 PAINT |

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| Tunnel restriction code | D/E | |
|--------------------------|-----------------|--|
| Maritime transport IMD | G: | |
| | | |
| IMDG Class: | 3 | |
| UN Number: | 1263 | |
| Label | 3 | |
| Packaging group: | II | |
| EMS Number: | F-E, <u>S-E</u> | |
| Marine pollutant: | No | |
| Proper shipping name: | PAINT | |
| Air transport ICAO-TI an | nd IATA-DGR: | |
| ICAO/IATA Class: | 3 | |
| UN/ID Number: | 1263 | |
| Label | 3 | |
| Packaging group: | II | |
| | PAINT | |

15 Regulatory information

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our current knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.
- R10 Flammable.
- R11 Highly flammable.
- R18 In use, may form flammable/explosive vapour-air mixture.
- R20 Harmful by inhalation.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- **R37** Irritating to respiratory system.
- R38 Irritating to skin.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R62 Possible risk of impaired fertility.
- R63 Possible risk of harm to the unborn child.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.

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(Contd. of page 7) **R67** Vapours may cause drowsiness and dizziness. Department issuing MSDS: Department of Quality Control Contact: **EN CHEMICALS S.A** 57,009 KALOCHORI THESSALONIKI, GREECE Ph: +30 2310 755 428 email: sales@enchemicals.com Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of ADK. Accord europeen sur te transport des marchandises dangereuses par koute (European Agreenent concerning the international carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent * Data compared to the previous version altered. GB