



**Cobar Europe BV**  
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EC-Material Safety Data Sheet according to 2001/58/EG  
ECDate : 21 May 03  
Release.....: 03.1

### 308-00 flux thinner

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#### 1. IDENTIFICATION OF THE PRODUCT and OF THE ENTERPRISE

Chemical name: Thinner for soldering fluxes

|                     |  |                  |                      |
|---------------------|--|------------------|----------------------|
| <b>Manufacturer</b> | Cobar Europe BV<br>PO Box 3251<br>4800 DG Breda<br>Holland | <b>Agent</b>     |                      |
| <b>Emergency</b>    | phone.: +31 (0)76 544 5566<br>fax.....: +31 (0)76 544 5577 | <b>Emergency</b> | phone.:<br>fax ..... |

#### 2. INFORMATION ON INGREDIENTS/COMPOSITION

| Ingredients   | Classification | Weight % | CAS-No  | TLV-value |
|---------------|----------------|----------|---------|-----------|
| 2-propanol    | F; R11         | 65-75    | 67-63-0 | 400 ppm   |
| Ethyl alcohol | F; R11         | 35-25    | 64-17-5 | 1000 ppm  |

#### 3. HAZARDS IDENTIFICATION

|                        |   |
|------------------------|---|
| Most important hazards | R11: highly flammable.  |
| Eyes                   | A high concentration of liquid, mist or vapor may cause irritation of the connective tissue.  |
| Skin                   | Repeatedly or continuous contact may decrease the skin, that may lead to irritation and allergies. Absorption of harmful substances is unlikely.  |
| Choking                | Depression of the central nervous system. An occurring symptom is amongst others alcohol poisoning.<br>Effects of overexposure may be: nausea, vomiting, tummy ache, dizziness, unconsciousness. Inhalation or vomiting may cause severe lung damage. |
| Inhalation             | Irritation of nose, throat and lack of breath. Exposure to vapors at a high concentration may have same effect as with inhalation.  |

#### 4. FIRST AID MEASURES

|              |   |
|--------------|---|
| Eye contact  | Flush with copious warm water for at least 15 minutes, with open eye. Call physician at once.   |
| Skin contact | Flush with copious water for at least 15 minutes. Infected clothing must be washed in case of reuse. Consult physician in case of blisters appearing, or if irritation persists.            |
| Ingestion    | Rinse mouth with water. Keep warm and calm. Administer oxygen when lack of breathing. Administer artificial respiration, restore breathing. DO NOT induce vomiting! Call physician at once. |
| Inhalation   | Remove to fresh air. Administer oxygen if lack of breathing occurs. Keep warm and calm. Administer artificial respiration. Call physician at once.  |



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### 5. EXTINGUISHING MEASURES

|                              |  |
|------------------------------|--|
| Proper extinguishing media   | Water, carbon dioxide, dry powder, foam. |
| Improper extinguishing media | Do not use jet of water.                 |
| Protective clothing          | Wearing of appropriate protective masks. |

### 6. MEASURES TO EXPOSURE OF THE PRODUCT

|                           |   |
|---------------------------|---|
| Personal precautions      | Wearing of protective clothing. Inhalation protection. Extinguish all ignition sources.   |
| Environmental precautions | Keep away from drains, surface-water, ground-water and soil.  |
| Cleaning procedures       | Absorb with sand and other diminishing material. Waste disposal could be done by incineration in furnace, but should be delivered in proper containers. |

### 7. HANDLING AND STORAGE

|          |   |
|----------|---|
| Handling | Use in well-ventilated areas; avoid breathing vapors. Keep containers closed when not in use.   |
| Storage  | Keep in cool, well-ventilated area away from heat or ignition source. This should be done in accordance with the applicable laws and regulations. |

### 8. EXPOSURE CONTROLS/PERSONAL EXPOSURE

|                                |   |
|--------------------------------|---|
| Control parameters             | TLV-value 400 ppm maximum limit for 2-propanol.   |
| Other regulations              | VbF-class: B BAT-value: 50 mg/l. Parameter: acetone.  |
| Measures for technical control | Preference of technical measures to prevent or control contact with the product. Isolating process and personnel, mechanical ventilation (dilution and local exhaust) and the regulation of process conditions. In case of non-prevention or non-control, a proper protective wearing should be used. |
| Respiratory protection         | In case of contact with high vapor concentrations.  |
| Hand protection                | Solvent-resistant gloves (butyl rubber).  |
| Eye protection                 | Safety glasses with side-shields.   |

### 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                       |   |
|---------------------------------------|---|
| Form                                  | liquid  |
| Color                                 | colorless   |
| Smell                                 | alcoholic   |
| Boiling point at °C                   | 80  |
| Melting point at °C                   | < -80   |
| Flashpoint at °C                      | 12  |
| Inflammability limits (vol. % in air) | 2.0 - 12.0  |
| Solubility in water (mg/l)            | partly  |
| Vapor pressure at 50 °C [kPa]         | 27*   |
| Vapor density (air = 1)               | 2.10*   |
| Density at 20 °C                      | 0.796   |
| Inflammability                        | Classification according to EC-regulations "highly flammable" |
| Ignition temperature at °C            | 390*  |
| Evaporation rate                      | 2.0   |

\* value for main component 2-propanol



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### 10. STABILITY AND REACTIVITY

|                                  |   |
|----------------------------------|---|
| Stability/reactivity             | Stable product at normal conditions. Hydrolyses in presence of water, acids, bases. |
| Conditions to avoid              | High temperatures.  |
| Materials to avoid               | Strong oxidizers.   |
| Hazardous decomposition products | Not known.  |

### 11. TOXICOLOGICAL INFORMATION

All information refers to the main component 2-propanol.

|                  |  |
|------------------|--|
| Acute toxicity   | LD50/oral/rat = 4700 - 5500 mg/kg.<br>LC50/inhalation/rat = 46.5 mg/l/4h.<br>LD50/skin/rabbit > 12800 mg/kg. |
| Specific effects | Not carcinogenic. Not mutagenic: tested with salmonella typhimurium egg cells at guinea pigs.                |

### 12. ECOLOGICAL INFORMATION

All information refers to the main component 2-propanol.

|                       |  |
|-----------------------|--|
| Mobility              | The product is volatile/gaseous and will be separated in gaseous condition.  |
| Degradability         | The product is slightly biodegradable BOD20 = >78% of ThOD.<br>The product is proved to be biodegradable under anaerobic conditions. |
| Bioaccumulation       | Not likely.  |
| Ecotoxicity           | EC50/24h/Daphnia = 9714 mg/l.<br>LC50/96h/Fish = 1000 mg/l.<br>EC50/24h/Algae = 1800 mg/l.   |
| Reference to BlmSchV  | TA-air class: III Alkyl alcohols with appendix E of the TA-air.  |
| Hazard classification | WGK 1. According to catalogue maritime hazard classification.  |

### 13. DISPOSAL CONSIDERATIONS

|                        |   |
|------------------------|---|
| Product                | Waste disposal could be done by incineration in furnace in accordance with the applicable laws and regulations. |
| Hazardous waste number | 14.03.03. Since regulations vary, consult applicable regulations, or authorities before disposal.               |

### 14. TRANSPORT INFORMATION

|                       |                                    |
|-----------------------|------------------------------------|
| UN number             | UN-1987                            |
| ADR/RID class         | 3                                  |
| ADR-packaging group   | II                                 |
| ADR/RID               | 33                                 |
| GGVS/GGVE             | Identifications similar to ADR/RID |
| IMDG-packaging group  | II                                 |
| IMDG-class            | 3.3                                |
| IMDG-Marine pollutant | no                                 |



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#### 14. TRANSPORT INFORMATION

|                        |                                 |
|------------------------|---------------------------------|
| IMDG-EmS number        | 3-06                            |
| IMDG-MFAG-table number | 305                             |
| IATA packaging group   | II                              |
| IATA class             | 3                               |
| GGVS                   | Identifications similar to IMDG |

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#### 15. REGULATORY INFORMATION

|                              |  |
|------------------------------|--|
| Physical/chemical indication | Highly flammable; symbol: F irritating Symbol: Xi.   |
| Risk-phrase                  | R11: highly flammable<br>R36/38: irritates eyes and skin.  |
| Safety-phrases               | S2: keep away from children.<br>S7: keep containers well closed.<br>S16: keep away from ignition source. Do not smoke. |
| EC appendix 1 classification | Highly flammable.  |
| EC number in appendix 1      | 603-003-00-0.  |

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#### 16. OTHER INFORMATION

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|---------------------|---|
| Further information | Instruction to staff according to Act Dangerous Goods, part 3, paragraph 14 and next. |
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#### **Disclaimer**

*The information given in this publication has been worked up to the best of the knowledge of Cobar, as well as taking into consideration the applicable laws and regulations. We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.*