

**Trade name: Entfetter****Safety data sheet in accordance with 91/155/EEC**

Date of printing : 03.03.2003

**01. Identification**

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|---|---|
| 01.01 Product details                     |   |
| 01.01.01. Trade name                      | Entfetter / Degreasing agent  |
| 01.02. Identification of the manufacturer |   |
| 01.02.01. Address                         | ERKODENT Erich Kopp GmbH, Siemensstr. 3,<br>D-72285 Pfalzgrafenweiler |
| 01.02.02. Information provided by         | Chemie  |
| 01.02.03. Telephone number                | Tel.: (+49) (0) 7445 / 85 01 - 0, Fax: (+49) (0) 7445 / 20 92         |
| 01.02.04. Emergency telephone number :    |   |

**02. Composition/information on ingredients**

|   |   |
|---|---|
| 02.01. Chemical characterization          | Petroleum 80/110 LNH  |
| 02.02. Substance / product identification | CAS: 64742-49-0; EINECS: 265-151-9; F, Xn, N;<br>R11,38,65,67,51/53 ; 25 < 50 % |
| 02.03. Hazardous ingredients              | AliphatischerHydrocarbons, n-, i- cyclo-Aliphaten ( C7-<br>C8)                  |
| 02.04. Additional information             | n-Hexan CAS: 110-54-3 < 5%  |

**03. Hazards possibilities**

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| 03.01. Hazard designation  | Highly flammable<br>In use, may form flammable/explosive vapour-air mixture.   |
| 03.02. Particular information pertaining specific risk for human / environment | In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.<br>Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

**04. First aid measures**

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| 04.01. General Information                |  |
| 04.02. First aid measures / inhalation.   | Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.   |
| 04.03. First aid measures / skin contact. | In case of contact with skin wash off immediately with soap and water.   |
| 04.04. First aid measures / eye contact.  | In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution.   |
| 04.05. First aid measures / ingestion..   | Do not induce vomiting., Remove the casualty into fresh air and keep him calm., Summon a doctor immediately.   |
| 04.06. Advice to doctor                   | The following symptoms may occur::<br>Headache, Dizziness, Nausea, Narcosis, CNS depression, Irritant effect on skin<br>Ingestion with following vomiting may cause lung aspiration which could result in chemical pneumonia or suffocation. |

**05. Fire-fighting measures**

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| 05.01. Suitable extinguishing media  | foam, water spray jet, water mist, dry chemical extinguisher, carbon dioxide., (sand) |
| 05.02. Extinguishing media that must not be used for safety reasons  | Full water jet  |
| 05.03. Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases. | In the event of fire the following can be released::<br>Carbon monoxide (CO)          |
| 05.04. Special protective equipment for firefighting   | Wear full protective suit., Use breathing apparatus.                                  |
| 05.05. Additional informations (chapter 5)   | Class: B  |

**06. Accidental release measures**

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| 06.01. personal precautions.                | Remove persons to safety., Avoid contact with skin, eyes and clothing., Keep away sources of ignition.  |
| 06.02. environmental precautions.           | Do not discharge into the drains/surface waters/groundwater., Do not discharge into the subsoil/soil., Prevent spread over a wide area (e.g. by containment or oil barriers).   |
| 06.03. methods for cleaning up/taking up.   | Take up with absorbent material (eg sand, kieselguhr, universal binder)., Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations., Dispose of absorbed material in accordance with the regulations., Containers in which spilt substance has been collected must be adequately labelled. |
| 06.04. Additional informations (chapter 6). | Refer to protective measures listed in sections 7 and 8.  |

**07. Handling and storage**

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| 07.01. Handling  |   |
| 07.01.01. Hints on safe handling.                          | Use only in well-ventilated areas., Keep limited supplies at workplace., Observe the usual precautions for handling chemicals.                        |
| 07.01.02. Hints for protection against fire and explosion. | Keep away from sources of ignition - refrain from smoking., The product is combustible., The product vapours are heavier than air.; VbF: A1; Class: B |

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| 07.02. Storage  |   |
| 07.02.01. Requirements for storage rooms and vessels. | Store product in closed containers.             |
| 07.02.02. Hints on storage assembly.                  | Keep away from flammable substances.            |
| 07.02.03. Further information on storage conditions.  | Keep container tightly closed, cool and dry.    |
| 07.02.04. Storage category                            | Flammable liquids                               |
| 07.02.05. Storage stability                           | May be stored indefinitely at room temperature. |
| 07.02.06. Recommended storage temperature             | 20 C  |

**08. Exposure controls/personal protection**

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| 08.01. Additional hints on technical system design.                  | See chapter 7; no measures exceeding the ones mentioned are necessary.   |
| 08.02. Ingredients with occupational exposure limits to be monitored | CAS no.: 64742-49-0 TRGS 900/901: MAK = 1000 mg/m <sup>3</sup> ; 200 ppm |

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| 08.03. Personal protective equipment Personal protective equipment Persönliche Schutzausrüstung |  |
| 08.03.01. Respiratory protection  | Breathing apparatus in the event of high concentrations.   |
| 08.03.02. Hand protection   | Butyl rubber gloves  |
| 08.03.03. Eye protection  | Safety goggles   |
| 08.03.04. Skin protection   | light protective clothing  |
| 08.03.05. General protective and hygiene measures   | Avoid contact with eyes and skin., Do not inhale gases/vapours/aerosols., Do not eat, drink or smoke during work time., Observe the usual precautions when handling chemicals. |

**09. Physical and chemical properties**

|                    |               |
|--------------------|---------------|
| 09.01. Appearance. |               |
| 09.01.01. Form     | Liquid        |
| 09.01.02. Colour   | colourless    |
| 09.01.03. Odour    | paraffin-like |

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| 09.02. Safety data |  |
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|                           |                     |       |                  |
|---------------------------|---------------------|-------|------------------|
| Changes in physical state |                     |       |                  |
| Boiling range             | 88 – 105            | °C    | ASTM D 1078      |
| Flash point               | - 12                | °C    | IP 170           |
| Ignition temperature      | 270                 | °C    | DIN 51794        |
| self ignition             |                     |       |                  |
| explosion limits          | 1                   | Vol % |                  |
| Upper explosion limit     | 8                   | Vol % |                  |
| Vapour pressure           |                     |       |                  |
|                           | 8500                | Pa    | 20 °C            |
|                           | 29000               | Pa    | 50 °C            |
| Density                   |                     |       |                  |
|                           | 0,713               | g/cm3 | 15 °C ASTM D1298 |
| solubility                |                     |       |                  |
|                           | virtually insoluble | g/l   | 20 °C            |
| Soluble in                |                     |       |                  |
|                           | -                   | g/l   |                  |
| pH-Value                  |                     |       |                  |
|                           | -                   |       |                  |
| Viscosity                 |                     |       |                  |
| kinematic                 | 0,61                | mm2/s | ASTM D 445       |

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| 09.03. Other information ( chapter 9.) | n-Hexane: < 5 %m<br>Benzene: < 0,1% |
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## 10. Stability and reactivity

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|---|---|
| 10.01. Hazardous reactions                  | None., Keep away from sources of ignition --- No smoking.               |
| 10.02. Hazardous decomposition products     | No hazardous decomposition products known.                              |
| 10.03. Thermal decomposition                | No decomposition if used as prescribed., Stable at ambient temperature. |
| 10.04. Additional informations (chapter 10) | -   |

## 11. Toxicological information

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| 11.01. Acute toxicity  | The values mentioned are those of the active ingredient.   |
| 11.01.01. Acute oral toxicity  | LD50: > 2000 mg/kg   |
| 11.01.02. Acute dermal toxicity  | LD50: > 2000 mg/kg   |
| 11.01.03. Acute inhalational toxicity  | LC50: > 5 mg/l   |
| 11.02. Irritant/corrosive effects  |  |
| 11.02.01. Irritant effect on skin  | non-irritant   |
| 11.02.02. Irritant effect on eyes  | non-irritant   |
| 11.03. Sensitization   |  |
| 11.04. Effects after repeated or prolonged exposition (subacute, subchronic, cronic) | Has a degreasing effect on the skin.   |
| 11.08. Other information (chapter 11.)   | Mutagenicity: None<br>Ingestion with following vomiting may cause lung aspiration which could result in chemical pneumonia or suffocation. |
| 11.09. Experiences made in practice.   | -  |
| 11.10. General remarks.  | -  |

## 12. Ecological information

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|---|---|
| 12.01. Data on elimination ( persistence and degradability) : |   |
| 12.01.01. Physico-chemical eliminability                      | The product can be degraded by abiotic, e.g. chemical or photolytic, processes. |
| 12.01.02. Biodegradability                                    | Moderately/partially biodegradable  |

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| 12.02. Behaviour in environment compartments. |  |
| 12.03. Ecotoxic effect                        |  |
| 12.03.01. Fish toxicity                       | 10 < LC50: < 100 mg/l slight or weak Toxic |
| 12.03.02. Daphnia toxicity                    | 1 < EC50: < 10 mg/l Toxic                  |
| 12.03.03. Algae toxicity                      | 1 < EC50: < 10 mg/l Toxic                  |
| 12.03.04. Bacteria toxicity                   | 1 < EC50: < 10 mg/l Toxic                  |
| 12.04. Further ecological information         | The product is highly volatile.            |

### 13. Disposal considerations

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| 13.01. Disposal considerations                           |   |
| 13.01.01. Disposal / product                             | -   |
| 13.01.02. Disposal / contaminated packagings.            | Completely emptied packagings can be given for recycling. |
| 13.02. Waste code no. / name of waste (for Germany only) | -   |

### 14. Transport information

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| 14.01. Land transport ADR/RID              |   |
| 14.01.01. Class                            | 3   |
| 14.01.02. Number/letter                    | 3 (B)   |
| 14.01.03. Hazard number (Kemler-number)    | 33  |
| 14.01.04. UN number                        | 3295  |
| 14.01.05. Technical name                   | Hydrocarbons Liquid n.a.g. Solvent Naphtha        |
| 14.01.06. Remarks                          | VG/PG: II   |
| 14.02. Inland waterways transport ADN/ADNR |   |
| 14.02.01. Class                            | 3   |
| 14.02.02. Number/letter                    | 3 (B)   |
| 14.02.03. Category                         | N   |
| 14.02.04. Technical name                   | Hydrocarbons Liquid n.a.g. Solvent Naphtha        |
| 14.02.05. Remarks                          | VG/PG: II   |
| 14.03. Marine transport IMDG/GGVSee        |   |
| 14.03.01. Class                            | 3.2   |
| 14.03.02. UN number                        | 3295  |
| 14.03.03. page                             | -   |
| 14.03.04. EmS                              | -   |
| 14.03.05. MFAG                             | -   |
| 14.03.06. MARINE POLLUTANT                 | No  |
| 14.03.07. Correct technical name           | HYDROGENCARBONS; LIQUID; N.O.S. (SOLVENT NAPHTHA) |
| 14.03.08. Remarks                          | VG/PG: II   |
| 14.04. Air transport ICAO/IATA             |   |
| 14.04.01. Class                            | 3 Flammable liquid                                |
| 14.04.02. UN number                        | 3295  |
| 14.04.03. page                             | -   |
| 14.04.04. Correct technical name           | HYDROGENCARBONS; LIQUID; N.O.S. (SOLVENT NAPHTHA) |
| 14.04.05. Remarks                          | VG/PG: II   |
| 14.05. Other information (chapter 14.)     |   |

### 15. Regulatory information

|   |                    |
|---|--------------------|
| 15.01. Labelling in accordance with GefStoffV/EC  |                    |
| The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances. |                    |
| 15.01.02. Hazard symbols  | F Highly flammable |

|  |    |                               |
|--|----|-------------------------------|
|  | Xn | Harmful                       |
|  | N  | Dangerous for the environment |

|           |         |   |
|-----------|---------|---|
| R phrases | R 11    | Highly flammable  |
|           | R 38    | Irritating to skin.   |
|           | R 65    | Harmful: may cause lung damage if swallowed.  |
|           | R 67    | Vapours may cause drowsiness and dizziness.   |
|           | R 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

|           |      |   |
|-----------|------|---|
| S phrases | S 9  | Keep container in a well-ventilated place.  |
|           | S 16 | Keep away from sources of ignition --- No smoking.  |
|           | S 23 | Do not breathe vapour.  |
|           | S 24 | Avoid contact with skin.  |
|           | S 33 | Take precautionary measures against static discharges.  |
|           | S 61 | Avoid release to the environment. Refer to special instructions/Safety data sheets.                     |
|           | S 62 | If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. |
|           |      |   |

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|--|--------------------------------|
| 15.02. Other regulations   |                                |
| 15.02.01. Restriction of occupation.   | -                              |
| 15.02.02. Decree for case of interference / remarks (for Germany only).                  | Highly flammable               |
| 15.02.03. Classification according to VbF / remarks (for Germany only).                  | A I<br>Class: B                |
| 15.02.04. TA-Luft (Ger.)   | III                            |
| 15.02.05. Water Hazard Class (Ger.)  | 1                              |
| 15.02.06. Other regulations, restrictions and prohibition regulations (for Germany only) | BG-Data sheet M 017 „Solvents“ |

## 16. Other information (chapter 16).

(n.a. = Not applicable; n.b.= not determined)

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.