

**Safety data sheet**

accord. to 1907/2006/EC, Art. 31, incl. Comm. Reg. (EU) No 453/2010

Printing date 21.07.2015

Revision: 20.07.2015

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name: DINITROL 512 B****1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use**

SU3, SU17, SU22

SU3, SU17, SU21, SU22

**Product category** PC1 Adhesives, sealants**Process category** PROC1-5, PROC7, PROC8a, PROC8b, PROC9-11, PROC13-14, PROC 19, PROC21**Environmental release category** ERC5, ERC8c, ERC8d, ERC8f**Article category** Not applicable**Application of the substance / the mixture** Adhesives**Uses advised against** SU21 Consumer uses: Private households / general public / consumers**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Hersteller/ Producer: EFTEC AG, Hofstrasse 31, CH-8590 Romanshorn

EU-Importeur/ EU-Importer: EFTEC Ltd., Rhigos/Aberdare, GB-Mid Glamorgan CF44 9UE (Responsible for chemical registration in EU)

Lieferant/ Supplier: DINOL GmbH, Pyrmonterstrasse 76, D-32676 Lügde

**Further information obtainable from:** msds@dinol.com**1.4 Emergency telephone number:** Giftnotruf D-Berlin +49(0)30 30686 790 Beratung in Deutsch und Englisch.**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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DACH

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## Hazard pictograms



GHS09

## Signal word Void

### Hazard statements

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Additional information:

EUH208 Contains 1-dodecyl-2-pyrrolidone, Dibutylbis(dodecylthio)-stannan. May produce an allergic reaction.

### 2.3 Other hazards

### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

Description: Adhesive

#### Dangerous components:

|                                      |   |          |
|--------------------------------------|---|----------|
| CAS: 68479-98-1<br>EINECS: 270-877-4 | diethylmethylbenzenediamine<br>☒ Xn R21/22-48/22; ☒ Xi R36; ☒ N R50/53<br>☒ STOT RE 2, H373; ☒ Aquatic Acute 1, H400; Aquatic Chronic 1, H410;<br>☒ Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Irrit. 2, H319  | 2,5-5%   |
| CAS: 2687-96-9<br>ELINCS: 403-730-1  | 1-dodecyl-2-pyrrolidone<br>☒ C R34; ☒ Xi R43; ☒ N R50/53<br>☒ Skin Corr. 1B, H314; ☒ Aquatic Acute 1, H400; Aquatic Chronic 1, H410;<br>☒ Skin Sens. 1, H317  | 0,25-<1% |
| CAS: 3855-32-1<br>EINECS: 223-362-3  | N-[3-(dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine<br>☒ C R34; ☒ Xn R21/22<br>☒ Acute Tox. 3, H311; ☒ Skin Corr. 1B, H314; ☒ Acute Tox. 4, H302   | ≤0,1%    |
| CAS: 1185-81-5<br>EINECS: 214-688-7  | Dibutylbis(dodecylthio)-stannan<br>☒ T R60-61-25; ☒ Xn R21/22-48-68; ☒ Xi R38; ☒ Xi R43; ☒ N R50/53<br>☒ Muta. 2, H341; Repr. 1A, H360; ☒ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☒ Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1, H317 | ≤0,1%    |

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### After inhalation:

Supply fresh air; consult doctor in case of complaints.

Seek medical treatment 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.

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**After swallowing:** Call for a doctor immediately.**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.

Use fire extinguishing methods suitable to surrounding conditions.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.**5.3 Advice for firefighters****Protective equipment:** No special measures required.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures** Not required.**6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:** Pick up mechanically.**6.4 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.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling** No special measures required.**Information about fire - and explosion protection:** No special measures required.**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** None.**Maximum storage temperature:** < 35 °C**Minimum storage temperature:** > 0 °C**Storage temperature:** 0 - 35 °C**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical facilities:** No further data; see item 7.**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

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**8.2 Exposure controls****Personal protective equipment:****General protective and hygienic measures:** Wash hands before breaks and at the end of work.**Respiratory protection:**

Not required.

**Protection of hands:**

Protective gloves (DIN EN 374)

Chemical resistant protective gloves with CE-labeling

To minimise the wetness in the glove due to perspiration changing of gloves during a shift is required.

Softening of the callus when wearing air-impermeable gloves is possible.

Check the permeability prior to each renewed use of the glove.

**Material of gloves**

Nitrile rubber, NBR

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:**

Safety glasses (DIN EN 166)

**Body protection:**

Protective work clothing

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

|                         |                 |
|-------------------------|-----------------|
| <b>Form:</b>            | Fluid           |
| <b>Colour:</b>          | Black           |
| <b>Odour:</b>           | Characteristic  |
| <b>Odour threshold:</b> | Not determined. |

**pH-value:** Not determined.**Change in condition****Melting point/Melting range:** Undetermined.

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|   |   |
|---|---|
| <b>Boiling point/Boiling range:</b>             | 270 °C  |
| <b>Flash point:</b>                             | 190 °C  |
| <b>Flammability (solid, gaseous):</b>           | Not applicable.                               |
| <b>Ignition temperature:</b>                    | 420 °C  |
| <b>Decomposition temperature:</b>               | Not determined.                               |
| <b>Self-igniting:</b>                           | Product is not selfigniting.                  |
| <b>Danger of explosion:</b>                     | Product does not present an explosion hazard. |
| <b>Explosion limits:</b>                        |   |
| <b>Lower:</b>                                   | 0,4 Vol %                                     |
| <b>Upper:</b>                                   | 2,9 Vol %                                     |
| <b>Vapour pressure:</b>                         | Not determined.                               |
| <b>Density at 20 °C:</b>                        | 1,15 g/cm <sup>3</sup>                        |
| <b>Relative density</b>                         | Not determined.                               |
| <b>Vapour density</b>                           | Not determined.                               |
| <b>Evaporation rate</b>                         | Not determined.                               |
| <b>Solubility in / Miscibility with water:</b>  | Not miscible or difficult to mix.             |
| <b>Partition coefficient (n-octanol/water):</b> | Not determined.                               |
| <b>Viscosity:</b>                               |   |
| <b>Dynamic:</b>                                 | Not determined.                               |
| <b>Kinematic:</b>                               | Not determined.                               |
| <b>Solvent content:</b>                         |   |
| <b>Organic solvents:</b>                        | 0,0 %   |
| <b>Solids content:</b>                          | 99,5 %  |
| <b>9.2 Other information</b>                    | No further relevant information available.    |

**SECTION 10: Stability and reactivity****10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**10.3 Possibility of hazardous reactions** No dangerous reactions known.**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known.**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****LD/LC50 values relevant for classification:****ATE (Acute Toxicity Estimates)**

Oral LD50 12777 mg/kg (rat)

Dermal LD50 570000 mg/kg (rabbit)

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## 68479-98-1 diethylmethylbenzenediamine

Oral LD50 738 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

## 2687-96-9 1-dodecyl-2-pyrrolidone

Oral LD50 >5000 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rabbit)

### Primary irritant effect:

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** 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.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Aquatic toxicity:** No further relevant information available.

**12.2 Persistence and degradability** No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

### Ecotoxicological effects:

**Remark:** Toxic for fish

### Additional ecological information:

#### General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

**12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation

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

#### European waste catalogue

|           |   |
|-----------|---|
| 08 00 00  | WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS |
| 08 04 00  | wastes from MFSU of adhesives and sealants (including waterproofing products)   |
| 08 04 09* | waste adhesives and sealants containing organic solvents or other dangerous substances  |

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**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN-Number****ADR, IMDG, IATA**

UN3082

**14.2 UN proper shipping name****ADR**UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (diethylmethylbenzenediamine, 1-dodecycl-2-  
pyrrolidone)**IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (diethylmethylbenzenediamine, 1-dodecycl-2-  
pyrrolidone), MARINE POLLUTANT**IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (diethylmethylbenzenediamine, 1-dodecycl-2-  
pyrrolidone)**14.3 Transport hazard class(es)****ADR****Class**

9 (M6) Miscellaneous dangerous substances and articles.

**Label**

9

**IMDG, IATA****Class**

9 Miscellaneous dangerous substances and articles.

**Label**

9

**14.4 Packing group****ADR, IMDG, IATA**

III

**14.5 Environmental hazards:**

Product contains environmentally hazardous substances.

**Marine pollutant:**

Yes

Symbol (fish and tree)

**Special marking (ADR):**

Symbol (fish and tree)

**Special marking (IATA):**

Symbol (fish and tree)

**14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

**Danger code (Kemler):**

90

**EMS Number:**

F-A,S-F

**14.7 Transport in bulk according to Annex II of****Marpol and the IBC Code**

Not applicable.

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**Transport/Additional information:****ADR****Limited quantities (LQ)**

5L

**Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**Transport category**

3

**Tunnel restriction code**

E

**IMDG****Limited quantities (LQ)**

5L

**Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**UN "Model Regulation":**UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (diethylmethylbenzenediamine, 1-dodecyl-2-  
pyrrolidone), 9, III**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Directive 2012/18/EU**

Named dangerous substances - ANNEX I None of the ingredients is listed.

**National regulations:****Other regulations, limitations and prohibitive regulations****Substances of very high concern (SVHC) according to REACH, Article 57**The mixture of substances contain no SVHC (Substances of Very High Concern, <http://echa.europa.eu>)**EU-VOC:** 0,00 %**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

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

**Relevant phrases**

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

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.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

R21/22 Harmful in contact with skin and if swallowed.

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- R25 Toxic if swallowed.  
R34 Causes burns.  
R36 Irritating to eyes.  
R38 Irritating to skin.  
R43 May cause sensitisation by skin contact.  
R48 Danger of serious damage to health by prolonged exposure.  
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R60 May impair fertility.  
R61 May cause harm to the unborn child.  
R68 Possible risk of irreversible effects.

**Department issuing MSDS: Entwicklung****Contact: msds@dinol.com****Abbreviations and acronyms:**

Acute Tox. 4: Acute toxicity, Hazard Category 4  
Acute Tox. 3: Acute toxicity, Hazard Category 3  
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
Muta. 2: Germ cell mutagenicity, Hazard Category 2  
Repr. 1A: Reproductive toxicity, Hazard Category 1A  
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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