

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 A**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.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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

Xi; Irritant

R36: Irritating to eyes.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

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.

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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.

Hazard pictograms



GHS07 GHS09

Signal word **Warning**

Hazard-determining components of labelling:

Aromatic polyisocyanate prepolymer

Polyisocyanate, aromatic

HMDI-Oligomere

Hazard statements

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Additional information:

EUH204 Contains isocyanates. 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: 127821-00-5	Aromatic polyisocyanate prepolymer ❌ Xi R36; ❌ Xi R43 ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	50-100%
CAS: 53317-61-6 NLP: 500-120-8	Polyisocyanate, aromatic ❌ Xi R36; ❌ Xi R43 ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	10-<20%
CAS: 70775-94-9 EC number: 615-163-9	ALKYLSULFONIC ACID ESTER OF PHENOL ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H312	5-<10%

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CAS: 141-78-6 EINECS: 205-500-4	ethyl acetate ☒ Xi R36; ☒ F R11 R66-67 ☒ Flam. Liq. 2, H225; ☒ Eye Irrit. 2, H319; STOT SE 3, H336	1-5%
CAS: 28182-81-2 NLP: 500-060-2	HMDI-Oligomere ☒ Xn R20; ☒ Xi R37; ☒ Xi R43 ☒ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	1-5%

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 and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

Seek medical treatment in case of complaints.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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: CO₂, powder or water spray. Fight larger fires with water spray.

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

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Ensure adequate ventilation.

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.

Ensure good ventilation/exhaustion at the workplace.

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*Prevent formation of aerosols.***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:** *Keep container tightly sealed.***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:****141-78-6 ethyl acetate**AGW (Germany) *Long-term value: 1500 mg/m³, 400 ppm
2(I);DFG, Y*MAK (Switzerland) *Short-term value: 2800 mg/m³, 800 ppm
Long-term value: 1400 mg/m³, 400 ppm
SSc;***Additional information:** *The lists valid during the making were used as basis.***8.2 Exposure controls****Personal protective equipment:****General protective and hygienic measures:***Keep away from foodstuffs, beverages and feed.**Immediately remove all soiled and contaminated clothing**Wash hands before breaks and at the end of work.**Avoid contact with the eyes.**Avoid contact with the eyes and skin.***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.*

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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 through 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:**

Form:	Fluid
Colour:	Black
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not determined.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

Flash point: < 100 °C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: > 300 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure: Not determined.

Density at 20 °C:	1,15 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.

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Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	4,0 %
Solids content:	95,0 %
9.2 Other information	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)		
Dermal	LD50	14815 mg/kg (rat)
Inhalative	LC50/4h	367 mg/l

Primary irritant effect:**Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation**

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

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.

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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.***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.***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

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

SECTION 14: Transport information

14.1 UN-Number**ADR, ADN, IATA****IMDG**

Void

UN3082

14.2 UN proper shipping name**ADR, ADN, IATA****IMDG**

Void

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (ALKYLSULFONIC ACID ESTER OF PHENOL),
MARINE POLLUTANT**14.3 Transport hazard class(es)****ADR, ADN, IATA****Class**

Void

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Class 9 Miscellaneous dangerous substances and articles.
Label 9

14.4 Packing group**ADR, IATA** Void**IMDG** III**14.5 Environmental hazards:**

Product contains environmentally hazardous substances.

Marine pollutant:

Yes

Symbol (fish and tree)

14.6 Special precautions for user

Not applicable.

EMS Number:

F-A,S-F

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

Not applicable.

Transport/Additional information:**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": -**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:**Technical instructions (air):**

Class	Share in %
NK	3-<5

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:** 4,00 %**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.

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Relevant phrases

H225 Highly flammable liquid and vapour.
H312 Harmful in contact with skin.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

R11 Highly flammable.
R20 Harmful by inhalation.
R36 Irritating to eyes.
R37 Irritating to respiratory system.
R43 May cause sensitisation by skin contact.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

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

Flam. Liq. 2: Flammable liquids, Hazard Category 2
Acute Tox. 4: Acute toxicity, Hazard Category 4
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
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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