

Safety data sheet

acc. to EU regulations 1272/2008 and 1907/2006 incl. all amendments

Printing date 13.08.2015

Revision: 13.08.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name: DINITROL 540****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** Activator /**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**

GHS02 flame

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



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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

Xi; Irritant

R36: Irritating to eyes.

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**Xn; Sensitising****R42:** May cause sensitisation by inhalation.**F; Highly flammable****R11:** Highly flammable.**R67:** Vapours may cause drowsiness and dizziness.**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.

Has a narcotising effect.

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

GHS02



GHS07



GHS08

Signal word Danger**Hazard-determining components of labelling:**

ethyl acetate

Thionophosphorsäure-tris-(p-isocyanatophenylester)

Hazard statements**H225** Highly flammable liquid and vapour.**H319** Causes serious eye irritation.**H334** May cause allergy or asthma symptoms or breathing difficulties if inhaled.**H336** May cause drowsiness or dizziness.**Precautionary statements****P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P405** Store locked up.**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 Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.

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Dangerous components:

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	50-<99,999%
CAS: 4151-51-3 EINECS: 223-981-9	Thionophosphorsäure-tris-(p-isocyanatophenylester) ❌ Xn R42; 🔥 F R11 R18 ⚠ Flam. Liq. 1, H224; ⚠ Resp. Sens. 1, H334	5-<10%

SVHC The mixture of substances contain no SVHC (Substances of Very High Concern, <http://echa.europa.eu>)**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 skin contact:** Generally the product does not irritate the skin.**After eye contact:**

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

After swallowing: Seek immediate medical advice.**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, sand, extinguishing powder. Do not use water.**For safety reasons unsuitable extinguishing agents:**

Water

Water with full jet

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**

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

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

6.3 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

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures required.

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.

7.2 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.

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 (DACH)	Long-term value: 1500 mg/m ³ , 400 ppm 2(I);DFG, Y
WEL (Great Britain english)	Short-term value: 400 ppm Long-term value: 200 ppm

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:



Use suitable respiratory protective device in case of insufficient ventilation.

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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***Butyl rubber**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:	Liquid
Colour:	Black
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not determined.**Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	76 °C

Flash point: -5 °C**Flammability (solid, gaseous):** Not applicable.**Ignition temperature:** 460 °C**Decomposition temperature:** Not determined.**Self-igniting:** Product is not selfigniting.

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Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	2,1 Vol %
Upper:	11,5 Vol %
Vapour pressure at 20 °C:	97 hPa
Density at 20 °C:	0,94 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
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:	89,9 %
Solids content:	10,0 %
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****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 allergy or asthma symptoms or breathing difficulties if inhaled.

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.

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STOT-single exposure*May cause drowsiness or dizziness.***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.***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, IMDG, IATA**

UN1866

14.2 UN proper shipping name**ADR**

UN1866 RESIN SOLUTION (vapour pressure at 50 °C not more than 110 kPa)

IMDG, IATA

RESIN SOLUTION

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14.3 Transport hazard class(es)**ADR**

Class 3 (F1) Flammable liquids.
Label 3

IMDG, IATA

Class 3 Flammable liquids.
Label 3

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

II

**14.5 Environmental hazards:
Marine pollutant:**

No

14.6 Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler):

33

EMS Number:

F-E,S-E

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

Not applicable.

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

5L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Transport category

2

Tunnel restriction code

D/E

IMDG**Limited quantities (LQ)**

5L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":UN 1866 RESIN SOLUTION (VAPOUR PRESSURE AT 50 °C
NOT MORE THAN 110 KPA), 3, II**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.

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National regulations:**Technical instructions (air):**

Class	Share in %
NK	50-100

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: 89,94 %**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

H224 Extremely flammable liquid and vapour.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H336 May cause drowsiness or dizziness.

R11 Highly flammable.

R18 In use, may form flammable/explosive vapour-air mixture.

R36 Irritating to eyes.

R42 May cause sensitisation by inhalation.

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:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 1: Flammable liquids, Hazard Category 1

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3