

Safety data sheet
according to 1907/2006/EC, Article 31






Printing date 30.11.2010

Revision: 30.11.2010

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** DINITROL 538 PLUS
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Priming
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
EFTEC AG, Hofstrasse 31, CH-8590 Romanshorn, Switzerland
DINOL GmbH, Pyrmonterstr. 76, D-32676 Lügde
- **Further information obtainable from:**
Tel. +49(0)5281 98298 0, FAX +49(0)5281 98298 60
thomas.suerig@dinol.com
- **Emergency telephone number:** Giftnotruf Berlin +49(0)30 30686 790 Beratung in Deutsch und Englisch.

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  **Xn; Sensitising**
R42/43: May cause sensitisation by inhalation and skin contact.
-  **Xi; Irritant**
R36: Irritating to eyes.
-  **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 narcotizing effect.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**
-   **Xn Harmful**
F Highly flammable
- **Hazard-determining components of labelling:**
Aliphatisches Polyisocyanat
diphenylmethanediisocyanat, isomeres and homologues

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· Risk phrases:

- 11 Highly flammable.
- 36 Irritating to eyes.
- 42/43 May cause sensitisation by inhalation and skin contact.
- 67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

- 9 Keep container in a well-ventilated place.
- 23 Do not breathe aerosol.
- 24/25 Avoid contact with skin and eyes.
- 37 Wear suitable gloves.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 60 This material and its container must be disposed of as hazardous waste.

· Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

· Other hazards**· Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 78-93-3 EINECS: 201-159-0	butanone ☒ Xi R36; ☒ F R11 R66-67	50-100%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate ☒ Xi R36 R10	5-10%
CAS: 28182-81-2	Aliphatisches Polyisocyanat ☒ Xi R43 R52/53	1-5%
CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues ☒ Xn R20; ☒ Xn R42/43; ☒ Xi R36/37/38	1-5%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate R10-66-67	1-5%
CAS: 1330-20-7 EINECS: 215-535-7	xylene, mixture of isomers ☒ Xn R20/21; ☒ Xi R38 R10	1-5%
	Adduct of an aliph. Polyisocyanate and a Silane ☒ Xn R20; ☒ Xi R43 R10	0.1-1%
CAS: 2530-83-8 EINECS: 219-784-2	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane ☒ Xn R22; ☒ Xi R36; ☒ Xi R43	0.1-1%

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

4 First aid measures

· Description of first aid measures**· After inhalation:**

Supply fresh air and to be sure call for a doctor.

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- In case of unconsciousness place patient stably in side position for transportation.*
- **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:** *Seek immediate medical advice.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** *CO2, sand, extinguishing powder. Do not use water.*
- **For safety reasons unsuitable extinguishing agents:**
Water
Water with full jet
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Prevent seepage into sewage system, workpits and cellars.
Do not allow to enter sewers/ surface or ground water.
- **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
- **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.

7 Handling and storage

- **Handling:**
- **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.
- **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.

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- **Maximum storage temperature:** < 35°C
- **Minimum storage temperature:** > 0°C
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

78-93-3 butanone

WEL Short-term value: 899 mg/m³, 300 ppm
Long-term value: 600 mg/m³, 200 ppm
Sk

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm
Long-term value: 724 mg/m³, 150 ppm

1330-20-7 xylene, mixture of isomers

WEL Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

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

- **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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves

- **Material of gloves**

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.

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· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **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:** -4°C· **Ignition temperature:** 300°C· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.· **Explosion limits:**

· Lower:	1.8 Vol %
· Upper:	11.5 Vol %

· **Vapour pressure at 20°C:** 105 hPa

· Density at 20°C:	0.949 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.· **Segregation coefficient (n-octanol/water):** Not determined.· **Viscosity:**· **Dynamic:** Not determined.· **Kinematic:** Not determined.· **Solvent content:**· **Organic solvents:** 71.3 %· **Solids content:** 28.7 %· **Other information** No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:**
- Sensitization possible through inhalation.
- Sensitization possible through skin contact.
- **Additional toxicological information:**
- The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
- Harmful
- Irritant
- **Sensitisation** May cause sensitisation by inhalation and skin contact.

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **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

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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.

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 33
- **UN-Number:** 1866
- **Packaging group:** II
- **Hazard label** 3
- **UN proper shipping name:** 1866 RESIN SOLUTION (vapor pressure at 50°C at most 110 kPa)
- **Tunnel restriction code** D/E

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1866
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** RESIN SOLUTION

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1866
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** RESIN SOLUTION

- **Special precautions for user** Warning: Flammable liquids.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **National regulations:**

1330-20-7	xylene, mixture of isomers
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· **Technical instructions (air):**

Class	Share in %
I	1-5
NK	50-100

· **EU-VOC:** 72.34 %· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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**

- R10 Flammable.
- R11 Highly flammable.
- R20 Harmful by inhalation.
- R20/21 Harmful by inhalation and in contact with skin.
- R22 Harmful if swallowed.
- R36 Irritating to eyes.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R38 Irritating to skin.
- R42/43 May cause sensitisation by inhalation and skin contact.
- R43 May cause sensitisation by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Entwicklung· **Contact:** Dr. T.Suerig

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