

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

1.1 Product identifier

· Trade name: **DINITROL 860 Skimfix "Standard" Harz (Polyol)**

· 1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

· Application of the substance / the preparation **Adhesives**

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

DINOL GmbH

Pyrmonter Str. 76

D-32676 Lügde

Tel: +49 5281 9829 80

Fax: +49 5281 9829 860

E-mail: msds@dinol.com

· Further information obtainable from: **Research & Development**

· 1.4 Emergency telephone number: **Giftnotruf 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 Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.



Xi; Irritant

R36/38: Irritating to eyes and skin.

R52/53: Harmful 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 EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product has been marked in accordance with EU Directives / respective national laws.

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

The R and S phrases may be omitted if packaging contains no more than 0.125 litre.

· **Code letter and hazard designation of product:**

Xn Harmful

· **Hazard-determining components of labelling:**

2,2'-Dimethyl-4,4'-methylene-bis(cyclohexylamine)

Propoxylated glycerin

· **Risk phrases:**

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

36/38 Irritating to eyes and skin.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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· **Safety phrases:**

- 9 Keep container in a well-ventilated place.
- 23 Do not breathe vapour/spray.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 60 This material and its container must be disposed of as hazardous waste.

· **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 characterization: Mixtures**

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

· **Dangerous components:**

CAS: 25214-63-5 NLP: 500-035-6	Ethylenediamine, propoxylated ☒ Xi R36 ⚠ Eye Irrit. 2, H319	25-<50%
CAS: 25791-96-2	Propoxylated glycerin ☒ Xn R22 ⚠ Acute Tox. 4, H302	25-<50%
CAS: 6864-37-5 EINECS: 229-962-1	2,2'-Dimethyl-4,4'-methylene-bis(cyclohexylamine) ☠ T R23/24; ☠ C R35; ☒ Xn R22; ☠ N R51/53 ⚠ Acute Tox. 3, H311; ⚠ Acute Tox. 3, H331; ⚠ Skin Corr. 1A, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302	1-<5%
CAS: 2768-02-7 EINECS: 220-449-8	Trimethoxyvinylsilan ☒ Xn R20 R10 ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H332	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**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Take affected persons into fresh air and keep quiet.

Seek medical treatment in case of complaints.

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **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.

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- **4.2 Most important symptoms and effects, both acute and delayed** *Dizziness*
- **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:** *Use fire extinguishing methods suitable to surrounding conditions.*
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
*Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
Mount respiratory protective device.*
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
*Ensure adequate ventilation
Wear protective clothing.
Particular danger of slipping on leaked/spilled product.*
- **6.2 Environmental precautions:**
*Prevent from spreading (e.g. by damming-in or oil barriers).
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:**
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
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**
*Use only in well ventilated areas.
Extractor required at the object.*
- **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:**
*Store only in the original receptacle.
Prevent any seepage into the ground.*
- **Information about storage in one common storage facility:** *Store away from oxidizing agents.*
- **Further information about storage conditions:**
Store receptacle in a well ventilated area.

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Store in dry conditions.

Keep container tightly sealed.

· **Maximum storage temperature:** < 50 °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.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.

Use skin protection cream for skin protection.

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 and skin.

· **Respiratory protection:**

Use suitable respiratory protective device when high concentrations are present.

Short term filter device:

· **Protection of hands:**



Protective gloves

· **Material of gloves**

Butyl rubber

PVC gloves (0,33 mm)

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.

· **Not suitable are gloves made of the following materials:** Strong material gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Use protective suit.

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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 At 20 °C: > 7

· Change in condition

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

· Flash point: > 160 °C (DIN 53213)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: > 350 °C

· Decomposition temperature: > 200 °C

· 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 At 20 °C: 0.0 hPa

· Density At 20 °C: 1.02 g/cm³ (DIN 51757)

· 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 At 20 °C:	900 mPas
Kinematic:	Not determined.

· 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions: Reacts with oxidizing agents.

· 10.4 Conditions to avoid: No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

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· **10.6 Hazardous decomposition products:** Carbon monoxide

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

6864-37-5 2,2'-Dimethyl-4,4'-methylene-bis(cyclohexylamine)

Oral	LD50	320-460 mg/kg (rat)
Dermal	LD50	200-400 mg/kg (rbt)
Inhalative	LC50/4 h	0.42 mg/l (rat)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** Sensitizing effect through inhalation is possible by prolonged exposure.

· **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

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

2768-02-7 Trimethoxyvinylsilan

EC50/48 h | 169 mg/l (DAPHNIA MAGNA)

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

· **Other information:** There is no data available for the product.

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

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

· **Ecotoxicological effects:**

· **Remark:**

There is no data available for the product.

Harmful to fish

· **Additional ecological information:**

· **General notes:**

At present there are no ecotoxicological assessments.

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to 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.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Dispose of as dangerous waste.

Dispose of in accordance with Local Authority requirements

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
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by dangerous substances
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 02	plastic packaging

· **Uncleaned packaging:**

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

SECTION 14: Transport information

· 14.1 UN-Number	Void
· ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	Void
· ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	Void
· ADR, ADN, IMDG, IATA	Void
· Class	Void
· 14.4 Packing group	Void
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	No
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **Labelling according to EU guidelines:**
*Observe the general safety regulations when handling chemicals.
 The product has been marked in accordance with EU Directives / respective national laws.
 The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
 The R and S phrases may be omitted if packaging contains no more than 0.125 litre.*
 - **Code letter and hazard designation of product:**
Xn Harmful
 - **Hazard-determining components of labelling:**
*2,2'-Dimethyl-4,4'-methylene-bis(cyclohexylamine)
 Propoxylated glycerin*
 - **Risk phrases:**
*20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
 36/38 Irritating to eyes and skin.
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*
 - **Safety phrases:**
*9 Keep container in a well-ventilated place.
 23 Do not breathe vapour/spray.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 46 If swallowed, seek medical advice immediately and show this container or label.
 60 This material and its container must be disposed of as hazardous waste.*
 - **National regulations:**
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| I | 4.0 |
- **Waterhazard class:** *Water hazard class 3 (Self-assessment): extremely hazardous for water.*
 - **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**
- H226 Flammable liquid and vapour.*
- H302 Harmful if swallowed.*
- H311 Toxic in contact with skin.*
- H314 Causes severe skin burns and eye damage.*
- H319 Causes serious eye irritation.*
- H331 Toxic if inhaled.*
- H332 Harmful if inhaled.*
- H411 Toxic to aquatic life with long lasting effects.*
- R10 Flammable.*
- R20 Harmful by inhalation.*
- R22 Harmful if swallowed.*

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*R23/24 Toxic by inhalation and in contact with skin.**R35 Causes severe burns.**R36 Irritating to eyes.**R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

- **Department issuing MSDS:** Research & Development
- **Contact:** Kontakt: msds@dinol.com oder Tel.: 0049 (0)5281 982 980
- *** Data compared to the previous version altered.**

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