

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

- **1.1 Product identifier**
- **Trade name: Dinitrol 77B**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Anticorrosion additive
- **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 Regulation (EC) No 1272/2008**



GHS02

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

- **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

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Naphtha (petroleum), hydrotreated heavy
- **Hazard statements**
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

(Contd. on page 2)

Printing date 09.07.2015

Version number 17

Revision: 09.07.2015

Trade name: Dinitrol 77B

(Contd. of page 1)

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

· **Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

· **2.3 Other hazards**

The petroleum naphtha / petroleum distillate / lubricating oil meet the requirements for not being classified as carcinogenic (<0,1% benzene alt<3% (w/w) DMSO extract (IP 346)).

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

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

· **Dangerous components:**

CAS: 64742-48-9 EC number: 919-857-5 Reg.nr.: 01-2119463258-33	Naphtha (petroleum), hydrotreated heavy Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H336	25-<50%
CAS: 25307-17-9 EINECS: 246-807-3 Reg.nr.: 01-2119510876-35	Bis(2-hydroxyethyl) oleylamine Skin Corr. 1B, H314; Aquatic Acute 1, H400; Acute Tox. 4 H302	<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 skin contact:** 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.

· **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 or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** 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:** Mount respiratory protective device.

· **Additional information** Cool endangered receptacles with water spray.

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:** 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).

Ensure adequate ventilation.

(Contd. on page 3)

GB

Trade name: Dinitrol 77B

(Contd. of page 2)

· **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**

Ensure good ventilation/exhaustion at the workplace.

Use only in well ventilated areas.

· **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:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep container tightly sealed.

· **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.

· **DNELs**

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Oral	Long-term - systemic effects, general population	125 mg/kg bw/day (General Population)
Dermal	Long-term - systemic effects, general population	125 mg/kg bw/day (General population)
	Long-term - systemic effects, worker	208 mg/kg bw/day (Worker)
Inhalative	Long-term - systemic effects, general population	185 mg/m3 (General Population)
	Long-term - systemic effects, worker	871 mg/m3 (Worker)

25307-17-9 Bis(2-hydroxyethyl) oleylamine

Oral	Long-term - systemic effects, general population	0.179 mg/kg bw/day (General Population)
Dermal	Long-term - systemic effects, general population	0.179 mg/kg bw/day (General population)
	Long-term - systemic effects, worker	0.25 mg/kg bw/day (Worker)
Inhalative	Long-term - systemic effects, general population	0.621 mg/m3 (General Population)
	Long-term - systemic effects, worker	1.76 mg/m3 (Worker)

· **PNECs**

25307-17-9 Bis(2-hydroxyethyl) oleylamine

Aquatic compartment - freshwater	0.000214 mg/L (not specified)
Aquatic compartment - marine water	0.000021 mg/L (not specified)
Aquatic compartment - sediment in freshwater	1.692 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	0.1692 mg/kg sed dw (not specified)
Sewage treatment plant	1.5 mg/L (not specified)
Terrestrial compartment - soil	5 mg/kg dw (not specified)

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

(Contd. on page 4)

Trade name: Dinitrol 77B

(Contd. of page 3)

· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:***Wash hands before breaks and at the end of work.**Do not inhale gases / fumes / aerosols.*· **Respiratory protection:** Filter A/P2· **Protection of hands:** Not required.· **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.**Nitrile rubber**Recommended thickness of the material: $\geq 0,12$ mm*· **Penetration time of glove material***> 480 min.**The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*· **Eye protection:***Tightly sealed goggles*

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	<i>Fluid</i>
Colour:	<i>Light brown</i>
Odour:	<i>Characteristic</i>
Odour threshold:	<i>Not determined.</i>

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

Melting point/Melting range:	<i>Undetermined.</i>
Boiling point/Boiling range:	<i>130 °C</i>

· **Flash point:** *29 °C (DIN 53213)*· **Flammability (solid, gaseous):** *Not applicable.*· **Ignition temperature:** *> 200 °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:	<i>0.6 Vol %</i>
Upper:	<i>7.0 Vol %</i>

· **Vapour pressure At 20 °C:** *3 hPa*· **Density At 20 °C:** *0.86 g/cm³ (DIN 51757)*· **Relative density** *Not determined.*

(Contd. on page 5)

Trade name: Dinitrol 77B

(Contd. of page 4)

· 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 At 20 °C:	90 s (DIN 53211/4)
· Solvent content:	
Organic solvents:	38.9 %
Solids content:	60.2 % (DIN 53216)
· 9.2 Other information	No further relevant information available.
· VOC (EU):	38.90 %
· VOC (EU):	334.6 g/l
· VOCV:	38.90 %

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:** Carbon monoxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**

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

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Oral	LD50	> 5000 mg/kg (RAT)
Dermal	LD50	> 5000 mg/kg (RABBIT)
Inhalative	LC50/4 h	> 4951 mg/l (RAT)

25307-17-9 Bis(2-hydroxyethyl) oleylamine

Oral	LD50	> 300-2000 mg/kg (RAT)
	LC50/96 h	> 0.1-1 mg/l (Fish)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Prolonged or repeated contact with skin may cause slight irritation and/or reddening.
- **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.
- **Additional toxicological information:** No further relevant information available.
- **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**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Trade name: Dinitrol 77B

(Contd. of page 5)

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

25307-17-9 Bis(2-hydroxyethyl) oleylamine

EC50/48 h >0.1-1 mg/l (DAPHNIA MAGNA)

EC50/72 h >0.01-0.1 mg/l (SELENASTRUM CAPRICORNUTUM)

· **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 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.

· 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.

Dispose of as dangerous waste.

· 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 01 00	wastes from MFSU and removal of paint and varnish
----------	---

08 01 11*	waste paint and varnish 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

UN1139

· 14.2 UN proper shipping name

· ADR

1139 COATING SOLUTION, special provision 640E

· IMDG, IATA

COATING SOLUTION

(Contd. on page 7)

Trade name: Dinitrol 77B

(Contd. of page 6)

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class 3 Flammable liquids.
· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA III

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Flammable liquids.
· Danger code (Kemler): 30
· EMS Number: F-E, S-E
· Segregation groups Alkalis

· 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: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
· Transport category 3
· Tunnel restriction code D/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":

UN1139, COATING SOLUTION, special provision 640E, 3, III

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms



GHS02 GHS07

· Signal word Warning

· Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated heavy

· Hazard statements

H226 Flammable liquid and vapour.

(Contd. on page 8)

Trade name: Dinitrol 77B

(Contd. of page 7)

*H336 May cause drowsiness or dizziness.***Precautionary statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
- P243 Take precautionary measures against static discharge.*
- P280 Wear protective gloves/protective clothing/eye protection.*
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.*
- P405 Store locked up.*
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

Directive 2012/18/EU

- Named dangerous substances - ANNEX I** None of the ingredients is listed.
- Seveso category P5c** FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t

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

Class	Share in %
NK	38.9

- Waterhazard class:** Water hazard class 2 (Self-assessment): 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.*
- H304 May be fatal if swallowed and enters airways.*
- H314 Causes severe skin burns and eye damage.*
- H336 May cause drowsiness or dizziness.*
- H400 Very toxic to aquatic life.*

Department issuing MSDS: Research & Development**Contact:** Kontakt: msds@dinol.com oder Tel.: 0049 (0)5281 982 980**Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*
- ICAO: International Civil Aviation Organisation*
- 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)*
- DNEL: Derived No-Effect Level (REACH)*
- PNEC: Predicted No-Effect Concentration (REACH)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- vPvB: very Persistent and very Bioaccumulative*
- Flam. Liq. 3: Flammable liquids, Hazard Category 3*
- Acute Tox. 4: Acute toxicity, Hazard Category 4*
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B*
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1*

(Contd. on page 9)



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

Printing date 09.07.2015

Version number 17

Revision: 09.07.2015

Trade name: Dinitrol 77B

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

(Contd. of page 8)

· *** Data compared to the previous version altered.**

GB