


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

- **Product identifier**
- **Trade name:** *Dinitrol 77B Spray*
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** *Anticorrosion additive*
- **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*
- **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**  
 *F+; Extremely flammable*  
*R12: Extremely flammable.*  
*R66: Repeated exposure may cause skin dryness or cracking.*
  - **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.*  
*At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.*  
*Warning! Pressurized container.*
  - **Classification system:**  
*The classification is according to the latest editions of the EU-lists, and extended by company and literature data.*
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- **Label elements**
  - **Labelling according to EU guidelines:**  
*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:**  
*F+ Extremely flammable*
  - **Risk phrases:**  
*12 Extremely flammable.*  
*66 Repeated exposure may cause skin dryness or cracking.*
  - **Safety phrases:**  
*2 Keep out of the reach of children.*  
*16 Keep away from sources of ignition - No smoking.*  
*23 Do not breathe fumes/aerosol.*  
*24 Avoid contact with skin.*  
*51 Use only in well-ventilated areas.*  
*60 This material and its container must be disposed of as hazardous waste.*
  - **Special labelling of certain preparations:**  
*Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.*  
*Do not spray on a naked flame or any incandescent material.*

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- *Buildup of explosive mixtures possible without sufficient ventilation.*
- **Classification in accordance with Directive 75/324/EEC: Extremely flammable**
- **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-extrakt (IP 346))*
- **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: 64742-48-9 EINECS: 265-150-3	Naphtha (petroleum), hydrotreated heavy  Xn R65 R10-66	25-<50%
CAS: 64743-01-7 EINECS: 265-206-7	Petrolatum (petroleum), oxidized	10-<25%
CAS: 74-98-6 EINECS: 200-827-9	Propane liquefied  F+ R12	10-<25%
CAS: 64742-52-5 EINECS: 265-155-0	Distillates (petroleum), hydrotreated heavy naphthenic	1-<5%
CAS: 61789-86-4	Calcium Sulfonate  Xi R36	1-<5%
CAS: 25307-17-9 EINECS: 246-807-3	Bis(2-hydroxyethyl) oleylamine  C R34;  Xn R22;  N R50	<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 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.*
- **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: CO<sub>2</sub>, 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.**

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents  
Absorb liquid components with liquid-binding material.
- **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**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Do not seal receptacle gas tight.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **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:**  
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.
- **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:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.  
Use suitable respiratory protective device in case of insufficient ventilation.

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· **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.

· **Eye protection:**



Tightly sealed goggles

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Aerosol
· <b>Colour:</b>	Brown
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	-44°C

· **Flash point:** < -20°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:**

· <b>Lower:</b>	0.6 Vol %
· <b>Upper:</b>	10.9 Vol %

· **Vapour pressure At 20°C:** 3.6 bar

· **Density At 20°C:** 0.736 g/cm<sup>3</sup> (DIN 51757)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

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- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - Organic solvents:** 51.8 %
- **Solids content:** 47.6 % (DIN 53216)
- **Other information:** No further relevant information available.
- **VOC (EU):** 51.83 %
- **VOC (EU):** 381.5 g/l
- **VOCV:** 51.83 %

## 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:**

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

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

Oral	LD50	>5000 mg/kg (RAT)
Dermal	LD50	>3000 mg/kg (RAT)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

## 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 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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.

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**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**

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing dangerous substances

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

**14 Transport information**

- **UN-Number**
- **ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

· **Transport hazard class(es)**

· **ADR**



- **Class** 2 5F Gases.
- **Label** 2.1

· **IMDG, IATA**



- **Class** 2.1
- **Label** 2.1

· **Packing group**

- **ADR, IMDG, IATA** Void

· **Environmental hazards:**

- **Marine pollutant:** No

- **Special precautions for user** Warning: Gases.

- **Danger code (Kemler):** -
- **EMS Number:** F-D,S-U
- **Segregation groups** Alkalis

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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- **Transport/Additional information:**
- **ADR**
- **Limited quantities (LQ)** 1L
- **Transport category** 2
- **Tunnel restriction code** D

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to EU guidelines:**  
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The R and S phrases may be omitted if packaging contains no more than 0,125 litre.
- **Code letter and hazard designation of product:**  
F+ Extremely flammable
- **Risk phrases:**  
12 Extremely flammable.  
66 Repeated exposure may cause skin dryness or cracking.
- **Safety phrases:**  
2 Keep out of the reach of children.  
16 Keep away from sources of ignition - No smoking.  
23 Do not breathe fumes/aerosol.  
24 Avoid contact with skin.  
51 Use only in well-ventilated areas.  
60 This material and its container must be disposed of as hazardous waste.
- **Special labelling of certain preparations:**  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material.  
Buildup of explosive mixtures possible without sufficient ventilation.
- **Classification in accordance with Directive 75/324/EEC: Extremely flammable**
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
NK	64.0
- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **Please note:** 5-6
- **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.  
R12 Extremely flammable.  
R22 Harmful if swallowed.

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*R34 Causes burns.**R36 Irritating to eyes.**R50 Very toxic to aquatic organisms.**R65 Harmful: may cause lung damage if swallowed.**R66 Repeated exposure may cause skin dryness or cracking.*

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

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