

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

- **Product details**
- **Trade name:** Dinitrol 4941 (1L)
- **Application of the substance / the preparation** Anticorrosion additive
- **Manufacturer/Supplier:**
Dinol GmbH
Pyrmonter Strasse 76
D-32676 Lügde
Tel: +49 5281 9829 80
Fax: +49 5281 9829 860
E-mail: thomas.suerig@dinol.com
- **Further information obtainable from:** Research & Development
- **Information in case of emergency:**
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**
R10-52/53-66-67: Flammable. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Repeated exposure may cause skin dryness or cracking. 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.
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.
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.
The product has been marked in accordance with EU Directives / respective national laws.
The R and S phrases may be omitted if packaging contains no more than 0.125 litre.
- **Risk phrases:**
10 Flammable.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.
- **Safety phrases:**
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
24 Avoid contact with skin.
43 In case of fire, use water.
51 Use only in well-ventilated areas.
60 This material and its container must be disposed of as hazardous waste.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

Trade name: Dinitrol 4941 (1L)

(Contd. of page 1)

· Dangerous components:		
CAS: 64742-49-0 EINECS: 265-151-9	Naphtha (petroleum), hydrotreated light  Xn R65 R10-66-67	10-<25%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom.  Xn R65;  Xi R37;  N R51/53 R10-66-67	10-<25%
CAS: 64742-82-1 EINECS: 265-185-4	Naphtha (petroleum), hydrodesulfurized heavy  Xn R65;  N R51/53 R10-66-67	5-<10%
CAS: 67-56-1 EINECS: 200-659-6	Methanol  T R23/24/25-39/23/24/25;  F R11	1-<5%

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

4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

5 Firefighting measures

- **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
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
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.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.

(Contd. on page 3)

Trade name: Dinitrol 4941 (1L)

(Contd. of page 2)

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

8 Exposure controls/personal protection

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

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

67-56-1 Methanol (1-<5%)

WEL ()	Short-term value: 333 mg/m ³ , 250 ppm
	Long-term value: 266 mg/m ³ , 200 ppm
	Sk

· **CAS No. Designation of material % Type Value Unit**

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.

· **Personal protective equipment:**

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· **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.

· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Nitrile 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**

> 480 min.

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

Goggles recommended during refilling

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

9 Physical and chemical properties

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Black

(Contd. on page 4)

Trade name: Dinitrol 4941 (1L)

(Contd. of page 3)

· Odour:	Characteristic
· Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: 130°C	
· Flash point:	25°C (DIN 53213)
· Ignition temperature:	200°C
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits: Lower: Upper:	0.6 Vol % 7.0 Vol %
· Vapour pressure At 20°C: · Vapour pressure At 50°C:	4.6 hPa 30 hPa
· Density At 20°C:	1.02 g/cm ³ (DIN 51757)
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Viscosity: Dynamic At 20°C:	1700 mPas
· Solvent content: Organic solvents:	41.9 %
· Solids content:	58.1 % (DIN 53216)
· Additional information: VOC (EU): VOC (EU):	41.93 % 427.6 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

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

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (RAT)
Dermal	LD50	>3400 mg/kg (RAT)
Inhalative	LC50/4 h	>10.2 mg/l (RAT)

64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy

Oral	LD50	>5000 mg/kg (RAT)
Dermal	LD50	>3000 mg/kg (RABBIT)
Inhalative	LC50/4 h	>2.8 mg/l (RAT)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

(Contd. on page 5)

Trade name: Dinitrol 4941 (1L)

(Contd. of page 4)

· **Sensitization:** No sensitizing effects known.

12 Ecological information

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **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.

Harmful to aquatic organisms

13 Disposal considerations

· **Product:**

· **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 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.

14 Transport information

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

· **ADR/RID class:** -

· **Remarks:** Transport is in line with the remarks under 2.2.3.1.5 of the ADR code till a volume of 450 ltr. If ADR > 450 ltr than class 3, packaging group III must be applied with accessory UN-number.

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Remarks:** Transport is in line with the remarks under 2.3.2.5 of the IMDG code till a volume of 30 ltr. If IMDG > 30 ltr than class 3, packaging group III must be applied.

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



· **ICAO/IATA Class:** 3

· **UN/ID Number:** 1139

· **Label:** 3

· **Packaging group:** III

· **Proper shipping name:** COATING SOLUTION

(Contd. on page 6)

Trade name: Dinitrol 4941 (1L)

· **Environmental hazards:** Marine pollutant

(Contd. of page 5)

15 Regulatory information

· **Chemical safety assessment** A Chemical Safety Assessment has not been carried out.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
I	1.3
NK	40.6

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R37 Irritating to respiratory system.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Research & Development

· **Contact:** Dr. Thomas Sürig

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