

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

- **1.1 Product identifier**
- **Trade name: DINITROL 4941 (1-20L)**
- **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.



GHS08

STOT RE 2      H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

STOT SE 3      H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **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 narcotising effect.

- **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 Regulation (EC) No 1272/2008**

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

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Trade name: DINITROL 4941 (1-20L)

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· **Hazard pictograms**

GHS02   GHS07   GHS08

· **Signal word** Warning· **Hazard-determining components of labelling:**

Naphtha (petroleum), hydrotreated light  
Naphtha (petroleum), hydrodesulfurized heavy  
Solvent naphtha (petroleum), light arom.  
Solvent naphtha (petroleum), light arom.

· **Hazard statements**

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P243 Take precautionary measures against static discharge.  
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.

· **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: 64742-49-0<br>EC number: 927-241-2<br>Reg.nr.: 01-2119471843-32 | Naphtha (petroleum), hydrotreated light<br>Xn R65<br>R10-52/53-66-67<br>Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 3, H412                                 | 10-<25% |
| CAS: 64742-82-1<br>EINECS: 265-185-4<br>Reg.nr.: 01-2119458049-33    | Naphtha (petroleum), hydrodesulfurized heavy<br>Xn R48/20-65; N R51/53<br>R10-66-67<br>Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336 | 5-<10%  |

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# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.03.2015

Version number 19

Revision: 27.01.2015

Trade name: DINITROL 4941 (1-20L)

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|  |   |        |
|--|---|--------|
| CAS: 64742-95-6<br>EC number: 918-668-5<br>Reg.nr.: 01-2119455851-35 | Solvent naphtha (petroleum), light arom.<br>Xn R65; Xi R37; N R51/53<br>R10-66-67<br>Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336 | 5-<10% |
| CAS: 64742-95-6<br>EC number: 918-668-5<br>Reg.nr.: 01-2119455851-35 | Solvent naphtha (petroleum), light arom.<br>Xn R65; Xi R37; N R51/53<br>R10-66-67<br>Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336 | 5-<10% |
| CAS: 67-56-1<br>EINECS: 200-659-6                                    | Methanol<br>T R23/24/25-39/23/24/25; F R11<br>Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370                             | 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**
- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- **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.
- **After swallowing:** If symptoms persist consult 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:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**  
Water  
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:**  
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).  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.

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**Trade name: DINITROL 4941 (1-20L)**

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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:

#### 67-56-1 Methanol

|     |   |
|-----|---|
| WEL | Short-term value: 333 mg/m <sup>3</sup> , 250 ppm |
|     | Long-term value: 266 mg/m <sup>3</sup> , 200 ppm  |
| Sk  |   |

### · DNELs

#### 64742-49-0 Naphtha (petroleum), hydrotreated light

|            |  |  |
|------------|--|--|
| Oral       | Long-term - systemic effects, general population | 300 mg/kg bw/day (General Population)      |
| Dermal     | Long-term - systemic effects, general population | 300 mg/kg bw/day (General population)      |
|            | Long-term - systemic effects, worker             | 300 mg/kg bw/day (Worker)                  |
| Inhalative | Long-term - systemic effects, general population | 900 mg/m <sup>3</sup> (General Population) |
|            | Long-term - systemic effects, worker             | 1500 mg/m <sup>3</sup> (Worker)            |

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

|            |  |   |
|------------|--|---|
| Oral       | Long-term - systemic effects, general population | 26 mg/kg bw/day (General Population)      |
| Dermal     | Long-term - systemic effects, general population | 26 mg/kg bw/day (General population)      |
|            | Long-term - systemic effects, worker             | 44 mg/kg bw/day (Worker)                  |
| Inhalative | Long-term - systemic effects, general population | 71 mg/m <sup>3</sup> (General Population) |
|            | Long-term - systemic effects, worker             | 330 mg/m <sup>3</sup> (Worker)            |

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

|            |  |   |
|------------|--|---|
| Oral       | Long-term - systemic effects, general population | 11 mg/kg bw/day (General Population)      |
| Dermal     | Long-term - systemic effects, general population | 11 mg/kg bw/day (General population)      |
|            | Long-term - systemic effects, worker             | 25 mg/kg bw/day (Worker)                  |
| Inhalative | Long-term - systemic effects, general population | 32 mg/m <sup>3</sup> (General Population) |
|            | Long-term - systemic effects, worker             | 150 mg/m <sup>3</sup> (Worker)            |

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

|        |  |                                      |
|--------|--|--------------------------------------|
| Oral   | Long-term - systemic effects, general population | 11 mg/kg bw/day (General Population) |
| Dermal | Long-term - systemic effects, general population | 11 mg/kg bw/day (General population) |
|        | Long-term - systemic effects, worker             | 25 mg/kg bw/day (Worker)             |

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|                         |   |  |
|-------------------------|---|--|
| <i>Inhalative</i>       | <i>Long-term - systemic effects, worker</i>             | <i>150 mg/m3 (Worker)</i>                  |
| <b>67-56-1 Methanol</b> |   |  |
| <i>Oral</i>             | <i>Acute - systemic effects, general population</i>     | <i>8 mg/kg bw/day (General Population)</i> |
|                         | <i>Long-term - systemic effects, general population</i> | <i>8 mg/kg bw/day (General Population)</i> |
| <i>Dermal</i>           | <i>Acute - systemic effects, general population</i>     | <i>8 mg/kg (General population)</i>        |
|                         | <i>Acute - systemic effects, worker</i>                 | <i>40 mg/kg bw/day (Worker)</i>            |
|                         | <i>Long-term - systemic effects, general population</i> | <i>8 mg/kg bw/day (General population)</i> |
| <i>Inhalative</i>       | <i>Long-term - systemic effects, worker</i>             | <i>40 mg/kg bw/day (Worker)</i>            |
|                         | <i>Acute - Local effects, worker</i>                    | <i>260 mg/m3 (Worker)</i>                  |
|                         | <i>Acute - local effects, general population</i>        | <i>50 mg/m3 (General Population)</i>       |
|                         | <i>Acute - systemic effects, general population</i>     | <i>50 mg/m3 (General Population)</i>       |
|                         | <i>Acute - systemic effects, worker</i>                 | <i>260 mg/m3 (Worker)</i>                  |
|                         | <i>Long-term - local effects, general population</i>    | <i>50 mg/m3 (General Population)</i>       |
|                         | <i>Long-term - local effects, worker</i>                | <i>260 mg/m3 (Worker)</i>                  |
|                         | <i>Long-term - systemic effects, general population</i> | <i>50 mg/m3 (General Population)</i>       |
|                         | <i>Long-term - systemic effects, worker</i>             | <i>260 mg/m3 (Worker)</i>                  |

· **PNECs**

**67-56-1 Methanol**

|   |   |
|---|---|
| <i>Aquatic compartment - freshwater</i>                   | <i>154 mg/L (not specified)</i>           |
| <i>Aquatic compartment - marine water</i>                 | <i>15.4 mg/L (not specified)</i>          |
| <i>Aquatic compartment - sediment in marine water</i>     | <i>570.4 mg/kg sed dw (not specified)</i> |
| <i>Aquatic compartment - water, intermittent releases</i> | <i>1540 mg/L (not specified)</i>          |
| <i>Sewage treatment plant</i>                             | <i>100 mg/L (not specified)</i>           |
| <i>Terrestrial compartment - soil</i>                     | <i>23.5 mg/kg dw (not specified)</i>      |

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

· **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 AX

· **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.

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.

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· **Eye protection:**



Tightly sealed goggles

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

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

|                    |                 |
|--------------------|-----------------|
| Form:              | Fluid           |
| Colour:            | Black           |
| · Odour:           | Characteristic  |
| · Odour threshold: | Not determined. |

· pH-value: Not determined.

##### · Change in condition

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 110 °C        |

· Flash point: 24 °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: | 0.6 Vol % |
| Upper: | 7.0 Vol % |

· Vapour pressure At 20 °C: 5 hPa

· Vapour pressure At 50 °C: 30 hPa

· Density At 20 °C: 1.02 g/cm<sup>3</sup> (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: | 1700 mPas       |
| Kinematic:        | Not determined. |

##### · Solvent content:

Organic solvents: 40.9 %

Solids content: 58.1 % (DIN 53216)

· 9.2 Other information: No further relevant information available.

· VOC (EU): 40.94 %

· VOC (EU): 417.6 g/l

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· VOCV: 40.94 %

**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 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:

ATE (Acute Toxicity Estimates)

|            |          |             |
|------------|----------|-------------|
| Dermal     | LD50     | 22059 mg/kg |
| Inhalative | LC50/4 h | 84.8 mg/l   |

**64742-49-0 Naphtha (petroleum), hydrotreated light**

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

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

|            |          |                     |
|------------|----------|---------------------|
| Oral       | LD50     | >5000 mg/kg (RAT)   |
| Dermal     | LD50     | 3400 mg/kg (RABBIT) |
| Inhalative | LC50/4 h | 13.1 mg/l (RAT)     |

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

|            |          |                      |
|------------|----------|----------------------|
| Oral       | LD50     | 3592 mg/kg (RAT)     |
| Dermal     | LD50     | >3160 mg/kg (RABBIT) |
| Inhalative | LC50/4 h | >6193 mg/l (RAT)     |

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

|        |      |                      |
|--------|------|----------------------|
| Dermal | LD50 | >2000 mg/kg (RABBIT) |
|--------|------|----------------------|

**67-56-1 Methanol**

|      |      |                   |
|------|------|-------------------|
| Oral | LD50 | 13000 mg/kg (rat) |
|------|------|-------------------|

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitisation: No sensitising effects known.
- Additional toxicological information: No further relevant information available.

**SECTION 12: Ecological information**

- 12.1 Toxicity

· Aquatic toxicity:

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

|           |                            |
|-----------|----------------------------|
| EC50/48 h | 10-22 mg/l (DAPHNIA MAGNA) |
|-----------|----------------------------|

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EC50/72 h 4.6-10 mg/l (ALGAE)

EC50/96 h 10-30 mg/L (Fish)

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

EC50/48 h 7.4 mg/l (DAPHNIA MAGNA)

EL50/48 h 3.2 mg/l (DAPHNIA MAGNA)

EL50/72 h 2.9 mg/l (SELENASTRUM CAPRICORNUTUM)

LL50/96 h 9.2 mg/l (SALMO GAIRDNERI / ONCORHYNCHUS MYKISS)

· **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.

· **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

· **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

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Trade name: DINITROL 4941 (1-20L)

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## · 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

## · 14.7 Transport in bulk according to Annex II of MARPOL73/78 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



GHS08

· Signal word Warning

## · Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated light

Naphtha (petroleum), hydrodesulfurized heavy

Solvent naphtha (petroleum), light arom.

Solvent naphtha (petroleum), light arom.

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**Trade name: DINITROL 4941 (1-20L)**

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· **Hazard statements**

- H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P243 Take precautionary measures against static discharge.  
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.

· **National regulations:**

· **Technical instructions (air):**

| Class | Share in % |
|-------|------------|
| I     | 1.4        |
| NK    | 39.6       |

- **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**

- H225 Highly flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H301 Toxic if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H311 Toxic in contact with skin.  
H331 Toxic if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H370 Causes damage to organs.  
H372 Causes damage to the central nervous system through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
.....  
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.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53 Harmful 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:** Kontakt: msds@dinol.com oder Tel.: 0049 (0)5281 982 980

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**Trade name: DINITROL 4941 (1-20L)**

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**· 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*  
*Flam. Liq. 2: Flammable liquids, Hazard Category 2*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Acute Tox. 3: Acute toxicity, Hazard Category 3*  
*STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1*  
*STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*  
*STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1*  
*STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2*  
*Asp. Tox. 1: Aspiration hazard, Hazard Category 1*  
*Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2*  
*Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3*

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