

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

· **Product details**

· **Trade name:** Dinitrol 442 Pyrmotec 53 hellgrau

· **Application of the substance / the preparation** Coating material

· **Manufacturer/Supplier:**

Dinol GmbH

Pyrmonter Strasse 76

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· **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

· **Hazard description:**



Xn Harmful

· **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.

R 10 Flammable.

R 20/21 Harmful by inhalation and in contact with skin.

R 38 Irritating to skin.

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

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **Additional information:**

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)).

## 3 Composition/information on ingredients

· **Chemical characterization**

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

· **Dangerous components:**

CAS: 1330-20-7 EINECS: 215-535-7	Xylene, mixed isomers, pure ☒ Xn, ☒ Xi; R 10-20/21-38	25-<50%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate R 10-66-67	5-<10%
CAS: 64742-82-1 EINECS: 265-185-4	Naphtha (petroleum), hydrodesulfurized heavy ☒ Xn, ☒ N; R 10-51/53-65-66-67	5-<10%
CAS: 108-65-6 EINECS: 203-603-9	2-Methoxy-1-methylethyl acetate ☒ Xi; R 10-36	1-<5%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. ☒ Xn, ☒ Xi, ☒ N; R 10-37-51/53-65-66-67	<1%

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CAS: 95-63-6	1,2,4-Trimethylbenzene
EINECS: 202-436-9	☒ Xn, ☒ Xi, ☒ N; R 10-20-36/37/38-51/53

&lt;1%

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

#### 4 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:**

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.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **Information for doctor:**

· **The following symptoms may occur:**

Headache

Dizziness

· **Treatment** If swallowed or in case of vomiting, danger of entering the lungs.

#### 5 Fire-fighting measures

· **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 caused by the substance, its products of combustion or resulting gases:**

In case of fire, the following can be released:

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

· **Protective equipment:** Mount respiratory protective device.

#### 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).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

#### 7 Handling and storage

· **Handling:**

· **Information for safe handling:**

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

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- **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.
- **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:**

### 1330-20-7 Xylene, mixed isomers, pure

WEL Short-term value: 441 mg/m<sup>3</sup>, 100 ppm  
Long-term value: 220 mg/m<sup>3</sup>, 50 ppm  
Sk; BMGV

### 123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m<sup>3</sup>, 200 ppm  
Long-term value: 724 mg/m<sup>3</sup>, 150 ppm

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

OEL Short-term value: 580 mg/m<sup>3</sup>, 100 ppm  
Long-term value: 350 mg/m<sup>3</sup>, 50 ppm  
CEFIC

### 108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m<sup>3</sup>, 100 ppm  
Long-term value: 274 mg/m<sup>3</sup>, 50 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:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Avoid close or long term contact with the skin.  
Avoid contact with the eyes and skin.

- **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:**



Protective gloves

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· **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.

· **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Neoprene gloves (0,47 mm)

· **For the permanent contact gloves made of the following materials are suitable: Neoprene gloves (0,47 mm)**

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Neoprene gloves (0,47 mm)

· **As protection from splashes gloves made of the following materials are suitable: Leather gloves**

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

Natural rubber

Strong material gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection: Protective work clothing**

## 9 Physical and chemical properties

· **General Information**

**Form:** Viscous  
**Colour:** Light grey  
**Odour:** Characteristic

· **Change in condition**

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

· **Flash point:** 22°C (DIN 53213)

· **Ignition temperature:** 370°C

· **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:** 1.1 Vol %  
**Upper:** 7.0 Vol %

· **Vapour pressure At 20°C:** 6.7 hPa

· **Density At 20°C:** 1.19 g/cm<sup>3</sup>

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

Not miscible or difficult to mix.

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· <b>Viscosity:</b>	
<b>Dynamic At 20°C:</b>	1300 mPas
· <b>Solvent separation test:</b> <3 %	
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	45.2 %
<b>Solids content:</b> 54.0 % (DIN 53216)	
· <b>Additional information:</b>	
<b>VOC (EU):</b>	44.00 %
<b>VOC (EU):</b>	525.0 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:**

#### 1330-20-7 Xylene, mixed isomers, pure

Oral	LD50	8700 mg/kg (RAT)
Dermal	LD50	2000 mg/kg (RABBIT)
Inhalative	LC50/4 h	6350 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:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **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

### 12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Harmful to fish

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· **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
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

· **Uncleaned packaging:**

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

**14 Transport information**

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



· **ADR/RID class:** 3 (F1) Flammable liquids.

· **Danger code (Kemler):** 33

· **UN-Number:** 1139

· **Packaging group:** III

· **Hazard label** 3

· **Description of goods:** 1139 COATING SOLUTION (with a flash point below 23°C and viscous according 2.2.3.1.4) (vapor pressure at 50°C at most 110 kPa)

· **Limited quantities (LQ)** LQ7

· **Transport category** 3

· **Tunnel restriction code** D/E

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Printing date 02.09.2010

Revision: 02.09.2010

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· **Maritime transport IMDG:**

- **IMDG Class:** 3
- **UN Number:** 1139
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** COATING SOLUTION

· **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

\* **15 Regulatory information**· **Labelling according to EU guidelines:**

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

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

Xn Harmful

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

Xylene, mixed isomers, pure

· **Risk phrases:**

- 10 Flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 38 Irritating to 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 fumes.
- 25 Avoid contact with eyes.
- 36/37 Wear suitable protective clothing and gloves.
- 51 Use only in well-ventilated areas.
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

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· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	25-50

· **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 R-phrases**

- 10 Flammable.
- 20 Harmful by inhalation.
- 20/21 Harmful by inhalation and in contact with skin.
- 36 Irritating to eyes.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 37 Irritating to respiratory system.
- 38 Irritating to skin.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmful: may cause lung damage if swallowed.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

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

· **Contact:** Dr. Thomas Sürig

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