







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

- **Product details**
- **Trade name:** Dinitrol 447 Protect super hellgrau
- **Application of the substance / the preparation** Coating material
- **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**
-  Xi; Irritant
 R38: Irritating to skin.
-  F; Highly flammable
 R11: Highly flammable.
-  N; Dangerous for the environment
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67: 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.
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.
- **Code letter and hazard designation of product:**
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 Xi Irritant
 F Highly flammable
 N Dangerous for the environment
- **Risk phrases:**
11 Highly flammable.
38 Irritating to skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
67 Vapours may cause drowsiness and dizziness.

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· **Safety phrases:**

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 23 Do not breathe fumes/aerosol.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

· **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: 64742-49-0 EINECS: 265-151-9	Naphtha (petroleum), hydrotreated light ☒ Xn R65; ☒ Xi R38; ☒ F R11; ☒ N R51/53 R67	25-<50%
CAS: 1330-20-7 EINECS: 215-535-7	Xylene, mixed isomers, pure ☒ Xn R20/21; ☒ Xi R38 R10	10-<25%
CAS: 141-78-6 EINECS: 205-500-4	Ethyl acetate ☒ Xi R36; ☒ F R11 R66-67	5-<10%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. ☒ Xn R65; ☒ Xi R37; ☒ N R51/53 R10-66-67	1-<5%
CAS: 7779-90-0 EINECS: 231-944-3	Trizinc bis(orthophosphate) ☒ N R50/53	<1%
CAS: 110-54-3 EINECS: 203-777-6	n-Hexane ☒ Xn R48/20-62-65; ☒ Xi R38; ☒ F R11; ☒ N R51/53 R67 Repr. Cat. 3	<1%

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

4 First aid measures

- **After inhalation:** 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. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
- **The following symptoms may occur:**
Headache
Dizziness

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5 Firefighting measures

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**
Water
Water with full jet
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Prevent seepage into sewage system, workpits and cellars.
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.
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.
- **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:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

* 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 (10-<25%)

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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141-78-6 Ethyl acetate (5-<10%)

WEL	Short-term value: 400 ppm Long-term value: 200 ppm
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· **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 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

· **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.

Neoprene gloves (0,47 mm)

· **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.

· **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**

· **Appearance:**

Form: Viscous

Colour: Light grey

· **Odour:** Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 80°C

· **Flash point:** < -5°C

· **Ignition temperature:** 260°C

· **Self-igniting:** Product is not selfigniting.

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· 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:	85 hPa
· Density At 20°C:	1.04 g/cm ³ (DIN 51757)
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Viscosity:	
Dynamic At 20°C:	700 mPas
· Solvent content:	
Organic solvents:	51.8 %
Solids content:	48.0 % (DIN 53216)
· Additional information:	
VOC (EU):	52.00 %
VOC (EU):	540.0 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:		
64742-49-0 Naphtha (petroleum), hydrotreated light		
Oral	LD50	>5000 mg/kg (RAT)
Dermal	LD50	>2600 mg/kg (RABBIT)
Inhalative	LC50/4 h	>193 mg/l (RAT)
7779-90-0 Trizinc bis(orthophosphate)		
Oral	LD50	>5000 mg/kg (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:

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Irritant

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12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Other information:** There is no data available for the product.
- **Ecotoxicological effects:**

- **Aquatic toxicity:**

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

EC50/48 h | 10 mg/l (PHAEOPHYTA)

- **Remark:** Toxic for 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.
Also poisonous for fish and plankton in water bodies.
Toxic for 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 Flammable liquids.
- **Danger code (Kemler):** 33

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- **UN-Number:** 1139
- **Packaging group:** II
- **Hazard label** 3
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 1139 COATING SOLUTION, special provision 640D
- **Excepted quantities (EQ):** E2
- **Limited quantities (LQ)** LQ6
- **Transport category** 2
- **Tunnel restriction code** D/E

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1139
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-E
- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Proper shipping name:** COATING SOLUTION (Naphtha (petroleum), hydrotreated light, Solvent naphtha (petroleum), light arom.)

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



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1139
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** COATING SOLUTION

· **Environmental hazards:**

Product contains environmentally hazardous substances: Trizinc bis(orthophosphate), Naphtha (petroleum), hydrotreated light

15 Regulatory information

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

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
I	0.1-1
NK	50-100

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

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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.

R20/21 Harmful by inhalation and in contact with skin.

R36 Irritating to eyes.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

R62 Possible risk of impaired fertility.

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.**