






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

- **Product details**
- **Trade name:** *Dinitrol 445 Dröhnex schwarz*
- **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**
 -  *Xn; Harmful*
 R63: *Possible risk of harm to the unborn child.*
 -  *Xi; Irritant*
 R38: *Irritating to skin.*
 -  *F; Highly flammable*
 R11: *Highly flammable.*
 R52/53-67: *Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 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:**
 -   *Xn Harmful
 F Highly flammable*
- **Hazard-determining components of labelling:**
Toluene
- **Risk phrases:**
*11 Highly flammable.
 38 Irritating to skin.*

(Contd. on page 2)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 1)

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

63 Possible risk of harm to the unborn child.

67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe fumes/aerosol.

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.

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   ;  ;  R67	10-<25%
CAS: 108-88-3 EINECS: 203-625-9	Toluene   ;  R67 Repr. Cat. 3	5-<10%
CAS: 64742-82-1 EINECS: 265-185-4	Naphtha (petroleum), hydrodesulfurized heavy   R10-66-67	5-<10%
CAS: 1330-20-7 EINECS: 215-535-7	Xylene, mixed isomers, pure   R10	5-<10%
CAS: 141-78-6 EINECS: 205-500-4	Ethyl acetate   R66-67	1-<5%
CAS: 110-54-3 EINECS: 203-777-6	n-Hexane   ;  ;  R67 Repr. Cat. 3	<1%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom.   ;  R10-66-67	<1%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-Trimethylbenzene   ;  R10	<1%

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

4 First aid measures

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

(Contd. on page 3)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 2)

- 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.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
- **The following symptoms may occur:**
 - Headache
 - Dizziness
 - Dizziness
- **Treatment** If swallowed or in case of vomiting, danger of entering the lungs.

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
- **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.
- **Additional information**
 - Cool endangered receptacles with water spray.
 - Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**
 - Keep away from ignition sources.
 - Ensure adequate ventilation
 - 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).
 - Dispose contaminated material as waste according to item 13.
 - Ensure adequate ventilation.
 - Do not flush with water or aqueous cleansing agents
- **Additional information:** See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
 - No special measures required.
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.

(Contd. on page 4)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 3)

· **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:** Store away from foodstuffs.

· **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:**

108-88-3 Toluene

WEL	Short-term value: 384 mg/m ³ , 100 ppm
	Long-term value: 191 mg/m ³ , 50 ppm
Sk	

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

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

1330-20-7 Xylene, mixed isomers, pure

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

141-78-6 Ethyl acetate

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

· **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 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.

Filter AX

· **Protection of hands:**



Protective gloves

(Contd. on page 5)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 4)

· **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.

Fluorocarbon rubber (Viton)

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:**

Strong material gloves

Natural rubber

· **Eye protection:**



Tightly sealed goggles

· **Body protection: Protective work clothing**

9 Physical and chemical properties

· **General Information**

· **Appearance:**

Form: Liquid

Colour: Black

· **Odour:** Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: > 77°C

· **Flash point:** -4°C (DIN 53213)

· **Ignition temperature:** 260°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: 1.2 Vol %

Upper: 7.0 Vol %

· **Vapour pressure At 20°C:** 85 hPa

· **Density At 20°C:** 1.17 g/cm³

· **Solubility in / Miscibility with**

water: Not miscible or difficult to mix.

· **Viscosity:**

Dynamic At 20°C: 1000 mPas

· **Solvent content:**

Organic solvents: 42.8 %

(Contd. on page 6)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 5)

Solids content: 56.3 % (DIN 53216)

Additional information:

VOC (EU): 42.70 %

VOC (EU): 500.0 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)

108-88-3 Toluene

Oral	LD50	5000 mg/kg (RAT)
Dermal	LD50	12124 mg/kg (RABBIT)

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:

Irritant

· **Inhalation:** Harmful by inhalation.

· **Ingestion:** Risk of chemical pneumonia if the product reaches the lungs at vomiting or similar.

12 Ecological information

· **Information about elimination (persistence and degradability):**

· **Other information:** There is no data available for the product.

(Contd. on page 7)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 6)

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

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

EC50/48 h 10 mg/l (PHAEOPHYTA)

· **Remark:** Harmful to fish

· **Additional ecological information:**

· **General notes:**

Harmful to aquatic organisms

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.

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

· **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

(Contd. on page 8)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 7)

· **Tunnel restriction code D/E**

· **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

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

· **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 phrases**

R10 Flammable.
 R11 Highly flammable.
 R20 Harmful by inhalation.
 R20/21 Harmful by inhalation and in contact with skin.
 R36 Irritating to eyes.
 R36/37/38 Irritating to eyes, respiratory system and skin.
 R37 Irritating to respiratory system.
 R38 Irritating to skin.
 R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

(Contd. on page 9)

Trade name: Dinitrol 445 Dröhnex schwarz

(Contd. of page 8)

- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R62 Possible risk of impaired fertility.
- R63 Possible risk of harm to the unborn child.
- 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.**

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