







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

- **Product details**
- **Trade name:** Dinitrol 7450 Bremsenreiniger Spray
- **Application of the substance / the preparation** *Cleaning material/ Detergent*
- **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+; Extremely flammable*
 R12: *Extremely 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.
Warning! Pressurized container.
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 marked in accordance with EU Directives / respective national laws.
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
The R and S phrases may be omitted if packaging contains no more than 0.125 litre.
- **Code letter and hazard designation of product:**
- 


Xi Irritant
F+ Extremely flammable
N Dangerous for the environment
- **Risk phrases:**
 12 *Extremely flammable.*
 38 *Irritating to skin.*
 51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

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67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

2 Keep out of the reach of children.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe fumes.

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.

· **Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

· **Classification in accordance with Directive 75/324/EEC: Extremely flammable**

· **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	50-<100%
CAS: 67-63-0 EINECS: 200-661-7	Propan-2-ol ☒ Xi R36; ☒ F R11 R67	10-<25%
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-<5%

· **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.

*** 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

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- **Special hazards caused by the substance, its products of combustion or resulting gases:** Carbon monoxide (CO)
- **Protective equipment:** Mount respiratory protective device.
- **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:**
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
- **Additional information:** See Section 7 for information on safe handling.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
Keep container tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Maximum storage temperature:** < 50 °C

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:**

67-63-0 Propan-2-ol

WEL	Short-term value: 1250 mg/m ³ , 500 ppm
	Long-term value: 999 mg/m ³ , 400 ppm

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124-38-9 carbon dioxide

WEL	Short-term value: 27400 mg/m ³ , 15000 ppm Long-term value: 9150 mg/m ³ , 5000 ppm
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- **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

- **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**
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
- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **General Information**
- **Appearance:**

Form:	Aerosol
Colour:	Clear
Odour:	Characteristic
- **Change in condition**

Melting point/Melting range:	Undetermined.
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Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	< 0°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:	2.0 Vol %
Upper:	12.0 Vol %
· Vapour pressure At 20°C:	6000 hPa
· Density At 20°C:	0.7 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	95.5 %
Solids content:	4.5 % (DIN 53216)
· Additional information:	
VOC (EU):	95.70 %
VOC (EU):	678.0 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)

- **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

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

12 Ecological information

· **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 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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**

16 00 00 | WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 05 00 | gases in pressure containers and discarded chemicals

16 05 04 | gases in pressure containers (including halons) containing 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:** 2 5F Gases.

· **Danger code (Kemler):** -

· **UN-Number:** 1950

· **Packaging group:** -

· **Hazard label** 2.1

· **Special marking:** Symbol (fish and tree)

· **Description of goods:** 1950 AEROSOLS

· **Limited quantities (LQ) LQ2**

· **Transport category** 2

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· **Tunnel restriction code D**

· **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Proper shipping name:** AEROSOLS (Naphtha (petroleum), hydrotreated light, HEXANES)

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



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

· **Environmental hazards:**

Product contains environmentally hazardous substances: 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 1 (Self-assessment): slightly 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**

R11 Highly flammable.

R36 Irritating to eyes.

R38 Irritating to skin.

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.

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Trade name: Dinitrol 7450 Bremsenreiniger Spray

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- R62 Possible risk of impaired fertility.
R65 Harmful: may cause lung damage if swallowed.
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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