

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

· Product details

· Trade name: Dinitrol MS-40 Spray

· Application of the substance / the preparation

Lubricant

Penetrating oil

· 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

· Classification of the substance or mixture

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



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.

R66-67: 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.

Warning! Pressurized container.

· 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:



F+ Extremely flammable

N Dangerous for the environment

· Risk phrases:

12 Extremely flammable.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

Trade name: Dinitrol MS-40 Spray

(Contd. of page 1)

· **Safety phrases:**

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition - No smoking.
- 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.

· **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: 64742-48-9 EINECS: 265-150-3	Naphtha (petroleum), hydrotreated heavy  Xn R65 R10-66-67	50-<100%
CAS: 74-98-6 EINECS: 200-827-9	Propane liquefied  F+ R12	10-<25%
CAS: 106-97-8 EINECS: 203-448-7	Butane, pure  F+ R12	10-<25%
CAS: 110-25-8 EINECS: 203-749-3	Oleoylsarkosin  Xi R38-41;  N R50/53	1-<5%
CAS: 95-38-5 EINECS: 204-414-9	2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol  C R34;  Xn R22;  N R50/53	<1%

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

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **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:**
- **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.

(Contd. on page 3)

Trade name: Dinitrol MS-40 Spray

(Contd. of page 2)

- **For safety reasons unsuitable extinguishing agents:**
Water
Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
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:**
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.
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:**
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.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

Trade name: Dinitrol MS-40 Spray

(Contd. of page 3)

· Ingredients with limit values that require monitoring at the workplace:

64742-47-8 Distillates (petroleum), hydrotreated light

TWA Long-term value: 1200 mg/m³
ExxonMobil (2000)

106-97-8 Butane, pure

WEL Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

· 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:**

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **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.

Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**



Protective gloves

· **Material of gloves** 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

9 Physical and chemical properties

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: Light yellow

· **Odour:** Petrol-like

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

(Contd. on page 5)

Trade name: Dinitrol MS-40 Spray

(Contd. of page 4)

· Flash point:	< -10°C (DIN 53213)
· Ignition temperature:	230°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:	0.5 Vol %
Upper:	10.9 Vol %
· Vapour pressure At 20°C:	3600 hPa
· Density At 20°C:	0.74 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	81.0 %
Solids content:	2.1 % (DIN 53216)
· Additional information:	
VOC (EU):	76.00 %
VOC (EU):	555.0 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:		
64742-48-9 Naphtha (petroleum), hydrotreated heavy		
Oral	LD50	>5000 mg/kg (RAT)
Dermal	LD50	>3000 mg/kg (RAT)
110-25-8 Oleoysarkosin		
Oral	LD50	2000 mg/kg (rat)
	LC50/96 h	1.37 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** The product degrades the skin.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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(Contd. on page 6)

Trade name: Dinitrol MS-40 Spray

(Contd. of page 5)

12 Ecological information

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

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
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 26	oil and fat other than those mentioned in 20 01 25
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:** 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
- **Excepted quantities (EQ):** E0

(Contd. on page 7)

Trade name: Dinitrol MS-40 Spray

(Contd. of page 6)

- **Limited quantities (LQ)** LQ2
- **Transport category** 2
- **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 (Oleoylsarkosin, 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol)

· **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: Oleoylsarkosin

15 Regulatory information

- **Chemical safety assessment** A Chemical Safety Assessment has not been carried out.
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
NK	50-100

- **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.
- R12 Extremely flammable.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R38 Irritating to skin.

(Contd. on page 8)

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Trade name: Dinitrol MS-40 Spray

(Contd. of page 7)

*R41 Risk of serious damage to eyes.**R50/53 Very toxic 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: Dr. Thomas Sürig**· * Data compared to the previous version altered.*

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