



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

- **Product details**
- **Trade name:** Dinitrol CAR 4941 spray
- **Application of the substance / the preparation** Anticorrosion additive
- **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**
 F+; Extremely flammable
R12: Extremely 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.
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:**
 F+ Extremely flammable
 - **Risk phrases:**
12 Extremely flammable.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
67 Vapours may cause drowsiness and dizziness.
 - **Safety phrases:**
2 Keep out of the reach of children.
3 Keep in a cool place.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
51 Use only in well-ventilated areas.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

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- **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**

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 | 10-<25% |
| CAS: 78-93-3 EINECS: 201-159-0 | Methyl ethyl ketone Xi R36; F R11 R66-67 | 10-<25% |
| 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: 64742-49-0 EINECS: 265-151-9 | Naphtha (petroleum), hydrotreated light Xn R65 R10-66-67 | 1-<5% |
| CAS: 64742-49-0 EINECS: 265-151-9 | Naphtha (petroleum), hydrotreated light Xn R65; Xi R38; F R11; N R51/53 R67 | 1-<5% |
| 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: 67-56-1 EINECS: 200-659-6 | Methanol T R23/24/25-39/23/24/25; F R11 | <1% |

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

4 First aid measures

- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

5 Firefighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

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- **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:**
Ensure adequate ventilation.
Absorb liquid components with liquid-binding material.

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.

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

78-93-3 Methyl ethyl ketone (10-<25%)

| | |
|-----|---|
| WEL | Short-term value: 899 mg/m ³ , 300 ppm |
| | Long-term value: 600 mg/m ³ , 200 ppm |
| | Sk |

106-97-8 Butane, pure (1-<5%)

| | |
|-----|--|
| WEL | Short-term value: 1810 mg/m ³ , 750 ppm |
| | Long-term value: 1450 mg/m ³ , 600 ppm |
| | Carc (if more than 0.1% of buta-1.3-diene) |

67-56-1 Methanol (<1%)

| | |
|-----|---|
| WEL | Short-term value: 333 mg/m ³ , 250 ppm |
| | Long-term value: 266 mg/m ³ , 200 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:** Wash hands before breaks and at the end of work.

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- **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**

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**

> 480 min.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **General Information**

- **Appearance:**

Form: Aerosol

Colour: Black

- **Odour:** Characteristic

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: -44°C

- **Flash point:** -97°C (DIN 53213)
Not applicable, as aerosol.

- **Ignition temperature:** 200°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: 0.9 Vol %

Upper: 11.5 Vol %

- **Vapour pressure At 20°C:** 8300 hPa
- **Vapour pressure At 30°C:** 10800 hPa
- **Internal Pressure At 20°C:** 3300 hPa
- **Internal Pressure At 50°C:** <8000 hPa

- **Density At 20°C:** 0.812 g/cm³ (DIN 51757)

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

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| | |
|---|-----------|
| · Solvent content: | |
| Organic solvents: | 65.1 % |
| Water: | 0.1 % |
| Solids content: 34.8 % (DIN 53216) | |
| · Additional information: | |
| VOC (EU): | 74.40 % |
| VOC (EU): | 561.0 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:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

* 12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Harmful to 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.
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 |

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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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
- Description of goods: 1950 AEROSOLS
- 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: No
- Proper shipping name: AEROSOLS

· 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

· Transport/Additional information:

For ADR and IMDG: Transport and packing are in accordance with the regulation for limited quantities. These products are therefore classified as no dangerous goods.

15 Regulatory information

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

| Class | Share in % |
|-------|------------|
| I | 0.7 |
| NK | 57.5 |

- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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- *Other regulations, limitations and prohibitive regulations*
- *Please note: 3-1*

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.*
- R12 *Extremely flammable.*
- R23/24/25 *Toxic by inhalation, in contact with skin and if swallowed.*
- R36 *Irritating to eyes.*
- R37 *Irritating to respiratory system.*
- R38 *Irritating to skin.*
- R39/23/24/25 *Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.*
- R51/53 *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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