

Material Safety Data Sheet

According to 91/155 EC

Printing date 20.03.2003

Reviewed on 14.03.2003

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

· **Product details**

- **Trade name:** *DINITROL 4010 AEROSOL*
- **Application of the substance / the preparation** *Anticorrosion additive*
- **Manufacturer/Supplier:** *EFTEC AB, Box 149, S-28122 Hässleholm, SWEDEN*
- **Further information obtainable from:** *Tel. +46 451 880 00, FAX +46 451 880 44*
- **Information in case of emergency:** *020-996000 (ECR Nr. Nat.) +46 8 337 043 (ERC Nr. Int.)*

2 Composition/information on ingredients

· **Chemical characterization**

- **Description:** *Hydrocarbon solvent based corrosion rust preventive.*

· **Dangerous components:**

| | | |
|--|--|---------------|
| | <i>Naphta (petroleum) hydrotreated heavy, cas nr 64742-48-9</i> ☒ Xn; R 10-65-66-67 | <i>10-25%</i> |
| | <i>Naphtha (petroleum), hydrodesulfurized heavy, cas nr 64742-82-1</i> ☒ Xn, ☒ N; R 10-51/53-65-66-67 | <i>10-25%</i> |
| | <i>Kalciumdinonylnaftalensulfonat, cas no 57855-77-3</i> ☒ Xi; R 36/38 | <i>£ 2.5%</i> |
| <i>CAS: 64742-47-8</i> <i>EINECS: 265-149-8</i> | <i>Distillates (petroleum), hydrotreated light</i> ☒ Xn; R 65-66 | <i>£ 2.5%</i> |

3 Hazards identification

· **Hazard description:**

F+ Extremely flammable

· **Information concerning particular hazards for human and environment:**

R 12 Extremely flammable.

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

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Keep out of the reach of children

· **Classification system:**

The classification of the product is based on Annex 1 of the substance directive (67/548/EEG) and ATP25.

· **Additional information:**

Classification with R65 is not required since the product is an aerosol.

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)).

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* 4 First-aid measures

- **After inhalation:** Take affected persons into fresh air and keep quiet.
- **After skin contact:** Remove contaminated clothing. Wash skin with soap and water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Give vegetable oil or cream.
Do not induce vomiting; call for medical help immediately.

* 5 Fire-fighting measures

- **Suitable extinguishing agents:**
Carbon dioxide
Fire-extinguishing powder
Foam
- **For safety reasons unsuitable extinguishing agents:** Water
- **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:** 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.
- **Additional information:** See Section 13 for disposal information.

* 7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
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.
Do not spray onto a naked flame or any incandescent material.
- **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.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

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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:**

Naphtha (petroleum) hydrotreated heavy, cas nr 64742-48-9

OEL Long-term value: 1000 mg/m³

74-98-6 propane

OES Asphyxiant

106-97-8 butane

OES Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm

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

OEL Short-term value: 1000 mg/m³

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

OEL Short-term value: 10 mg/m³
Long-term value: 5 mg/m³

· **Personal protective equipment:**

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· **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, NBR

Chloroprene rubber, CR

· **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.

· **Eye protection:** Safety glasses

9 Physical and chemical properties

· **General Information**

| | |
|----------------|--------------|
| Form: | Fluid |
| Colour: | Colourless |
| Odour: | Solvent-like |

· **Change in condition**

Melting point/Melting range: Undetermined.

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

· **Flash point:**

Not applicable, as aerosol.

· **Self-igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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- | | |
|--|------------------------|
| · Explosion limits: | |
| Lower: | 0.6 Vol % |
| Upper: | 10.9 Vol % |
| · Density at 23°C: | |
| | 0.89 g/cm ³ |
| · Solubility in / Miscibility with water: | |
| | Insoluble. |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **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:**

Naphtha (petroleum) hydrotreated heavy, cas nr 64742-48-9

| | | |
|--------|------|----------------------|
| Oral | LD50 | >2000 mg/kg (rat) |
| Dermal | LD50 | >2000 mg/kg (rabbit) |

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

| | | |
|------------|---------|----------------------|
| Oral | LD50 | >2000 mg/kg (rat) |
| Dermal | LD50 | >2000 mg/kg (rabbit) |
| Inhalative | LC50/4h | >5000 ppm (rat) |

- **Primary irritant effect:**

- **on the skin:**

Degreases the skin which with long or often repeated contact may cause reddening and sometimes eczema. In combination with bad personal hygiene, it may cause dermatitis, oil acne or other skin changes.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Inhalation:**

May cause headache, dizziness, tiredness and indisposition. At high concentrations reaction time and memory may deteriorate and unconsciousness may occur. Long or often repeated inhalation of high concentrations may cause permanent damage to the nervous system.

- **Ingestion:**

May cause similar symptoms as for inhalation.

Risk of chemical pneumonia if the product reaches the lungs at vomiting or similar.

12 Ecological information

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

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

| | |
|-----------|----------|
| BOD28/COD | 75 % (-) |
|-----------|----------|

- **Other information:** The product is biodegradable.

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· **Ecotoxicological effects:**· **Aquatic toxicity:****Naphtha (petroleum) hydrotreated heavy, cas nr 64742-48-9**

| | |
|------|--|
| EC50 | 10-100 mg/l (bak) 10-100 mg/l (daphnia) |
| IC50 | 10-100 mg/l (alga) |
| LC50 | 10-100 mg/l (fish) |

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

| | |
|---------|----------------|
| LC50 | 1-100 mg/l (-) |
| log Pow | >3 (-) |

· **Remark:** The solvent can be bioaccumulated.· **General notes:** Not known to be hazardous to water.* **13 Disposal considerations**· **Product:**· **Recommendation** Dispose of in accordance with Local Authority requirements· **European waste catalogue**

| | |
|----------|--|
| 07 00 00 | WASTES FROM ORGANIC CHEMICAL PROCESSES |
| 07 07 00 | wastes from the MFSU of fine chemicals and chemical products not otherwise specified |
| 07 07 99 | wastes not otherwise specified |

· **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):** 23· **UN-Number:** 1950· **Packaging group:** II· **Hazard label** 2.1· **Description of goods:** 1950 AEROSOLS· **Remarks:** The product is classified as limited quantities according to ADR regulations when delivered in packaging of max 1000 ml or as aerosols.· **Maritime transport IMDG:**· **IMDG Class:** 2.1· **UN Number:** 1950· **Packaging group:** II· **EMS Number:** F-D,S-U· **Marine pollutant:** Yes· **Proper shipping name:** AEROSOLS

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- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Packaging group:** II
- **Proper shipping name:** AEROSOLS, flammable

* 15 Regulatory information

- **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

- **Risk phrases:**
 - 12 Extremely flammable.
 - 52/53 Harmful 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.
- **Safety phrases:**
 - 2 Keep out of the reach of children.
 - 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
 - 46 If swallowed, seek medical advice immediately and show this container or label.
 - 51 Use only in well-ventilated areas.
 - 60 This material and its container must be disposed of as hazardous waste.
- **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.
Keep out of the reach of children

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· Technical instructions (air):

| Class | Share in % |
|-------|------------|
| III | 25-50 |

· **EU-VOC:** 66.42 %

* 16 Other information

The information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our product from the point of view of safety requirements and is not intended to guarantee any particular property.
Aerosol, contains 20-30% propane/butane as propellant.

- **Relevant R-phrases**
 - 10 Flammable.

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36/38 Irritating to eyes and skin.

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

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS: Q&E Department**

· **Contact: Lena Almestrand**

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