

## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 29.01.2009

Revision: 29.01.2009

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

- **Product details**
- **Trade name:** DINITROL 4010 SPRAY
- **Application of the substance / the preparation** Anticorrosion additive
- **Manufacturer/Supplier:**  
 EFTEC Ltd. Rhigos, Aberdare, Mid-Glamorgan CF44 9UE, United Kingdom  
 EFTEC Aftermarket GmbH Pyrmonterstr. 76 D-32676 Lügde
- **Further information obtainable from:** +44(0)16 85 81 54 00 Q&E Plasticsols
- **Information in case of emergency:** +44(0)16 85 81 54 00

### 2 Hazards identification

- **Hazard description:**  
 F+ Extremely flammable
- **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.  
 Has a narcotizing effect.  
 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.  
 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. Keep away from sources of ignition - No smoking.  
 Buildup of explosive mixtures possible without sufficient ventilation.  
 Keep out of the reach of children
- **Classification system:**  
 The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **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)).  
 Classification with R65 is not required since the product is an aerosol.

### 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; R 10-65-66	10-25%
CAS: 74-98-6 EINECS: 200-827-9	propane ☒ F+; R 12	10-25%

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CAS: 106-97-8 EINECS: 203-448-7	butane F+; R 12	10-25%
CAS: 64742-82-1 EINECS: 265-185-4	Naphtha (petroleum), hydrodesulfurized heavy Xn, N; R 10-51/53-65-66-67	10-25%

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

## 4 First-aid measures

- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- **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:** Seek medical treatment.

## 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
Foam  
Fire-extinguishing powder  
Carbon dioxide  
Water haze
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:**  
Ensure adequate ventilation  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
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:**  
Ensure adequate ventilation.  
Absorb liquid components with liquid-binding material.  
Do not flush with water or aqueous cleansing agents

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Keep receptacles tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
Use only in well ventilated areas.
- **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.

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- **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.
- **Maximum storage temperature:** < 30°C

## \* 8 Exposure controls/personal protection

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

· <b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>64742-48-9 Naphtha (Petroleum) hydrotreated heavy</b>	
WEL	Long-term value: 1000 mg/m <sup>3</sup>
<b>106-97-8 butane</b>	
WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
<b>64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy</b>	
OEL	Short-term value: 580 mg/m <sup>3</sup> , 100 ppm Long-term value: 350 mg/m <sup>3</sup> , 50 ppm EU HSPA

- **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.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves**  
Nitrile rubber, NBR  
Chloroprene rubber, CR  
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.
- **Eye protection:**



Tightly sealed goggles

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· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

### · General Information

**Form:** Aerosol  
**Colour:** Transparent  
**Odour:** Solvent-like

### · Change in condition

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Not applicable, as aerosol.

· **Flash point:** -97°C· **Ignition temperature:** 240.0°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:** 0.6 Vol %  
**Upper:** 10.9 Vol %

· **Vapour pressure at 20°C:** 4500 hPa· **Density at 20°C:** 0.736 g/cm<sup>3</sup>· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

### · Solvent content:

**Organic solvents:** 68.4 %

· **Solids content:** 31.6 %

## 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:

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

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4h	10 mg/l (RAT)

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**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:** Irritation to eyes possible after a long exposure time.· **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:**

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

May cause similar symptoms as for inhalation.

**12 Ecological information**· **Information about elimination (persistence and degradability):****Naphtha (petroleum), hydrodesulfurized heavy, cas nr 64742-82-1**

BOD28/COD	75 % (-)
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· **Ecotoxicological effects:**· **Aquatic toxicity:****Naphtha (petroleum), hydrodesulfurized heavy, cas nr 64742-82-1**

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

· **Remark:** Harmful to fish· **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**

Dispose of in accordance with Local Authority requirements

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

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- **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
- **Description of goods:** 1950 AEROSOLS

- **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** Yes (P)
- **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

### \* 15 Regulatory information

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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· **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.

· **Safety phrases:**

- 2 Keep out of the reach of children.  
 9 Keep container in a well-ventilated place.  
 16 Keep away from sources of ignition - No smoking.  
 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:**

Contains 2-butanone oxime. May produce an allergic reaction.  
 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. Keep away from sources of ignition - No smoking.  
 Buildup of explosive mixtures possible without sufficient ventilation.  
 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 %
I	0.1-1
NK	50-100

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **EU-VOC:** 68.05 %

## 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.  
 Aerosol, contains 20-30% propane/butane as propellant.

· **Relevant R-phrases**

- 10 Flammable.  
 12 Extremely flammable.  
 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

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**· Contact:***J. Maxwell**john.maxwell@eftecltd.co.uk***· \* Data compared to the previous version altered.**

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