

Material Safety Data Sheet

According to 91/155 EEC

Printing date 31.03.2004

Reviewed on 31.03.2004

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

· **Product details**

- **Trade name:** DINITROL 510
- **Application of the substance / the preparation** Anticorrosion additive
- **Manufacturer/Supplier:**
EFTEC Ltd. Rhigos, Aberdare, Mid-Glamorgan CF44 9UE, United Kingdom
- **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 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

CAS: 141-43-5	2-aminoethanol	☒ Xn; R 20-36/37/38	10-25%
EINECS: 205-483-3			

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

* 3 Hazards identification

- **Hazard description:**
C Corrosive
- **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.
R 34 Causes burns.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

* 4 First-aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Take affected persons into fresh air and keep quiet.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Remove contaminated clothing. Wash skin with soap and water.
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Give some milk or water if the person is in conscious.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

GB

(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 31.03.2004

Reviewed on 31.03.2004

Trade name: **DINITROL 510**

(Contd. of page 1)

* 5 Fire-fighting measures

- **Suitable extinguishing agents:**
Carbon dioxide
Fire-extinguishing powder
Water spray
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
In case of fire, the following can be released:
Nitrogen oxides (NOx)
- **Protective equipment:** Wear self-contained respiratory protective device.

* 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).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

* 7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from frost.
Store receptacle in a well ventilated area.
Keep container tightly sealed.

* 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:**

141-43-5 2-aminoethanol	
OES	Short-term value: 15 mg/m ³ , 6 ppm
	Long-term value: 7.6 mg/m ³ , 3 ppm

- **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.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 31.03.2004

Reviewed on 31.03.2004

Trade name: **DINITROL 510**

(Contd. of page 2)

· **Protection of hands:**



Protective gloves

· **Material of gloves**

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.

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

*

9 Physical and chemical properties

· **General Information**

Form:	Liquid
Colour:	Green
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range:	10 °C
Boiling point/Boiling range:	100°C

· **Flash point:** Not applicable.

· **Ignition temperature:** 385°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 23°C:** 1.01 g/cm³

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

· **pH-value at 20°C:** 12.5

· **Solvent content:**
Water: 75.0 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Dangerous reactions** No dangerous reactions known.

(Contd. on page 4)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 31.03.2004

Reviewed on 31.03.2004

Trade name: DINITROL 510

(Contd. of page 3)

· **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**· **LD/LC50 values relevant for classification:**

141-43-5 2-aminoethanol

Oral	LD50	2050 mg/kg (rat)
Dermal	LD50	1000 mg/kg (rabbit)

· **Primary irritant effect:**· **on the skin:** Irritant to skin and mucous membranes.· **on the eye:** Irritating effect.· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

Irritant

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:

· **Inhalation:** Irritating to respiratory tract.

12 Ecological information

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

141-43-5 2-aminoethanol

BOD28/COD >80 % (.)

· **Other information:** The product is biodegradable.· **Ecotoxicological effects:**· **Acquatic toxicity:**

141-43-5 2-aminoethanol

EC50	10-100 mg/l (daphnia)
LC50/96h	170 mg/l (fish)

· **Remark:** The product is not bioaccumulated.· **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.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

· **Product:**· **Recommendation**

Dispose of in accordance with Local Authority requirements

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· **European waste catalogue**

07 00 00 WASTES FROM ORGANIC CHEMICAL PROCESSES

(Contd. on page 5)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 31.03.2004

Reviewed on 31.03.2004

Trade name: **DINITROL 510**

(Contd. of page 4)

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:** 8 (C7) Corrosive substances.
- **Danger code (Kemler):** 80
- **UN-Number:** 2491
- **Packaging group:** III
- **Hazard label** 8
- **Description of goods:** 2491 ETHANOLAMINE, mixture

· Maritime transport IMDG:



- **IMDG Class:** 8
- **UN Number:** 2491
- **Label** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** ETHANOLAMINE, mixture

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 2491
- **Label** 8
- **Packaging group:** III
- **Proper shipping name:** ETHANOLAMINE, mixture

*

15 Regulatory information

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

(Contd. on page 6)

GB

Material Safety Data Sheet

According to 91/155 EEC

Printing date 31.03.2004

Reviewed on 31.03.2004

Trade name: **DINITROL 510**

(Contd. of page 5)

· **Code letter and hazard designation of product:**

C Corrosive

· **Risk phrases:**

34 Causes burns.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.

20 When using do not eat or drink.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

56 Dispose of this material and its container to hazardous or special waste collection point.

· **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 %
Water	50-100
II	10-25

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

*

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.

· **Relevant R-phrases**

20 Harmful by inhalation.

36/37/38 Irritating to eyes, respiratory system and skin.

· **Department issuing MSDS:** Q&E Department· **Contact:** P. Williams· *** Data compared to the previous version altered.**

GB