

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 05/21/2002

Reviewed on 05/13/2002

1 Identification of substance

- **Product details**
- **Trade name:** **D-500**
- **Manufacturer/Supplier:** EFTEC AG Hofstrasse 31 CH-8590 Romanshorn, Switzerland
- **Information department:** +41(0)71 466 43 00 Customer Support Laboratory
- **Emergency information:** +41(0)1 251 51 51 Swiss Toxicological Information Centre

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

101-68-8	diphenylmethane-4,4'-di-isocyanate	£ 2.5%
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3 Hazards identification

- **Hazard description:**
Harmful
- **Canadian Hazard Symbols**



Information pertaining to particular dangers for man and environment:

May cause sensitization by inhalation.
Contains isocyanates. See information supplied by the manufacturer.

Classification system:

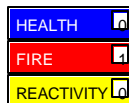
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0 - 4)



Health = 0
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 0
Fire = 1
Reactivity = 0

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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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **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).
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.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** 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:** None.
- **Class according to regulation on flammable liquids:** Void

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

1333-86-4 Carbon black

PEL	3.5 mg/m ³
REL	3.5* mg/m ³
	*0.1 in presence of PAHs
TLV	3.5 mg/m ³

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101-68-8 diphenylmethane-4,4'-di-isocyanate

PEL Short-term value: C 0.2 mg/m³, C 0.02 ppm
 REL Short-term value: C 0.2* mg/m³, C 0.02* ppm
 Long-term value: 0.05 mg/m³, 0.005 ppm
 *10-min
 TLV 0.051 mg/m³, 0.005 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:** Not required.

· **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

· **Form:** Pasty
 · **Color:** Black
 · **Odor:** Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 208°C (406°F)

· **Flash point:** 164°C (327°F)

· **Ignition temperature:** 370°C (698°F)

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

Lower: 0.1 Vol %

Upper: 0.2 Vol %

· **Vapor pressure at 20°C (68°F):** 0 hPa

· **Density:** Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Solvent content:**

Organic solvents: 0.0 %

10 Stability and reactivity

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

No decomposition if used according to specifications.

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- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** 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:** Sensitization possible through inhalation.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful.

12 Ecological information

- **General notes:**
Water hazard class 1 (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.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

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15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

101-68-8 diphenylmethane-4,4'-di-isocyanate

· **TSCA (Toxic Substances Control Act):**

28553-12-0 di-"isononyl" phthalate

1333-86-4 Carbon black

101-68-8 diphenylmethane-4,4'-di-isocyanate

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

101-68-8 diphenylmethane-4,4'-di-isocyanate CBD;D

· **IARC (International Agency for Research on Cancer)**

1333-86-4 Carbon black 2B

101-68-8 diphenylmethane-4,4'-di-isocyanate 3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

1333-86-4 Carbon black A4

77-58-7 dibutyltin dilaurate A4

· **MAK (German Maximum Workplace Concentration)**

1333-86-4 Carbon black 3

101-68-8 diphenylmethane-4,4'-di-isocyanate 3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

1333-86-4 Carbon black

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



Harmful

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· **Hazard-determining components of labelling:***diphenylmethane-4,4'-di-isocyanate*· **Risk phrases:***May cause sensitization by inhalation.*· **Safety phrases:***Do not breathe gas/fumes/vapour/spray.**In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.**After contact with skin, wash immediately with plenty of soap and water**Wear suitable protective clothing.**In case of accident or if you feel unwell, seek medical advice immediately.**This material and its container must be disposed of as hazardous waste.*· **Special labeling of certain preparations:***Contains isocyanates. See information supplied by the manufacturer.*· **National regulations:***The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.*· **Classification according to VbF: Void**· **Technical instructions (air):**

Class	Share in %
I	£ 2,5
III	25-50

· **Water hazard class: Water hazard class I (Self-assessment): slightly 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.*· **Department issuing MSDS: Customer Support Laboratory**· **Contact: H. Perler**