

## Safety data sheet

Date of issue: December 6, 2005

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

*Identification of the product:*

DFO, article number B-79500 (1 gram), B-79600 (5 gram)

*Use of substance/preparation:*

Amino acid reagent

*Company/undertaking identification:*

Supplier: BVDA International b.v., Postbus 2323, 2002 CH HAARLEM, the Netherlands  
Telephone: +31-23-5424708 Fax: +31-23-5322358 e-mail: info@bvda.nl

### 2. Composition/information on ingredients

	CAS-Number	% w/w	Symbol	R-phrases	EC-Index-No.
1,8-Diazafluoren-9-one	54078-29-4	>99	Xn	22	--

Synonyms: DFO

Mw: 182.2 g/mol

Molecular formula: C<sub>11</sub>H<sub>8</sub>N<sub>2</sub>O

(Full text of R-phrases in heading 16)

### 3. Hazard identification

Harmful if swallowed.

Careful, not fully tested compound.

### 4. First aid measures

After inhalation: Fresh air, in case of respiratory problems seek medical advice.

After skin contact: Wash off with plenty of water, soap or other suitable cleaning agents. Remove contaminated clothing.

After eye contact: Rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist.

After ingestion: Make victim drink plenty of water, induce vomiting. Seek medical advice.

### 5. Fire fighting measures

Suitable extinguishing media: CO<sub>2</sub> (carbon dioxide), water spray, dry chemical powder, or appropriate foam.

Special risk: Combustible. Ambient fire may liberate hazardous vapours.

Special protective equipment for fire fighting: Do not stay in dangerous zone without self-contained breathing apparatus.

Other information: Prevent fire-fighting water from entering surface water or groundwater.

### 6. Accidental release measures

Person-related precautionary measures: Avoid substance contact. Avoid generation of dusts; do not inhale dusts.

Environmental-protection measures: Do not allow to enter sewerage system.

Procedures for cleaning / absorption. Take up dry and forward for disposal. Clean up affected area.

### 7. Handling and storage

*Handling:* Protect from light.

*Storage:* Keep container tightly closed. Dry. Protected from light. At +15° C to +25° C.

## 8. Exposure controls/personal protection

### *Personal protective equipment:*

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: Required when dusts are generated, filter P2.

Eye protection: Required (wear tight fitting safety goggles).

Hand protection: Required (Glove material: Nitrile rubber, layer thickness: 0.11 mm, breakthrough time: >480 Min.)

Industrial hygiene: Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with the substance.

## 9. Physical and chemical properties

Form: Crystalline solid

Colour: Yellow

Odour: Odourless

Melting temperature: 229° C

Boiling temperature: Not available

Ignition temperature: Not available

Flash point: Not available

Explosion limits: Not available

Density: Not available

Solubility in water (25° C): Limited solubility

Thermal decomposition: Not available

## 10. Stability and reactivity

*Stability:* Stable

*Conditions to be avoided:* Strong heating. Action of light (decomposition).

*Substances to avoid:* Strong oxidizing agents, light, strong bases.

*Hazardous decomposition products:* No information available.

## 11. Toxicological information

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

### *Further toxicological information:*

After inhalation: Material may be irritating to mucous membranes and upper respiratory tract.

After skin contact: May cause skin irritation.

After eye contact: May cause eye irritation

Multiple routes: May be harmful by inhalation, ingestion, or skin absorption.

*Further data:* Hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

## 12. Ecological information

Ecotoxic effects: Quantitative data on the ecological effect of this product are not available.

Further ecologic data: Do not allow to enter waters, waste water, or soil!

## 13. Disposal considerations

### *Product:*

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies, which will advise you on how to dispose of special waste.

*Packaging:*

Disposal in compliance with federal, state and local environmental regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

**14. Transport information**

*RID/ADR:* Not classified as hazardous for road transport.

*IMDG:* Not classified as hazardous for sea transport

*IATA:* Not classified as hazardous for air transport

**15. Regulatory information**

*Labelling according to EC Directives:*

Symbol: Xn

Description: Harmful

R-phrase: R 22: Harmful if swallowed.

S-phrases: S 22-24/25: Do not breathe dust. Avoid contact with skin and eyes.

**16. Other information**

Text of any R-phrases referred to under heading 2:

22 Harmful if swallowed.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.