



## Safety Data Sheet

According to Regulation (EC) 1907/2006



5780 Fumaryl Chloride

# Identification of the substance/preparation and of the company or firm

## 1.1 Identification of the substance or preparation

Name:

Fumaryl Chloride

**Synonym:**

2-Butenedioyl Dichloride, 2-Butenedioyl di-Chloride, Fumaric Acid Dichloride, Fumaroyl Dichloride, Fumaroyl di-Chloride

**REACH Registration Number:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

## 1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

## 1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: [product.safety@panreac.com](mailto:product.safety@panreac.com)

#### 1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

## Identification of dangers

Classification of the substance or the mixture.

#### Classification Regulation (CE) n° 1272/2008.

Skin Corr. 1B

STOT SE 3

Acute Tox. 4

Acute Tox. 4

#### Hazard Pictograms



#### Signal word

Danger

#### Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H312 Harmful in contact with skin.

H302 Harmful if swallowed.

#### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash...thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Classification (67/548/CEE or 1999/45/CE).

R21/22

C CorrosiveR37

R34

For the full text of the R-phrases mentioned in this section, see section 16.

## Component Composition/Information

Name: Fumaryl Chloride

M.= 152,96 CAS [627-63-4]

EC number (EINECS): 211-005-4

## First aid

### 4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

### 4.2 Inhaling:

Take the person out into the fresh air. In the event of suffocation, proceed immediately to provide artificial respiration. Seek immediate medical assistance.

### 4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

### 4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

### 4.5 Swallowing:

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Do not neutralize.

## Fire-fighting means

### 5.1 Suitable fire-extinguishing means:

Dry powder. Carbon dioxide (CO<sub>2</sub>).

### 5.2 Fire-fighting means which must NOT be used:

Water. Foam.

### 5.3 Special risks:

Combustible. Keep away from sources of ignition. In the event of fire, toxic fumes may form:

### 5.4 Protective equipment:

Suitable clothing and footwear.

## Measures to be taken in the event of accidental spillage

### 6.1 Individual precautions:

Do not inhale the fumes.

### 6.2 Precautions for care of the environment:

Avoid pollution of the soil, water supplies and drains.

### **6.3 Methods for collection/cleaning:**

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water. Neutralize with diluted sodium hydroxide.

## **Handling and storage**

### **7.1 Handling:**

Handle under an extractor fan.

### **7.2 Storage:**

Well sealed containers. Dry atmosphere. In well ventilated premises. Away from sources of ignition and heat. Room temperature.

## **Staff exposure/protection controls**

### **8.1 Technical protective measures:**

No special indications.

### **8.2 Exposure limit control:**

: Data not available.

### **8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection.

### **8.4 Hand protection:**

Use suitable gloves

### **8.5 Eye protection:**

Use suitable goggles.

### **8.6 Individual hygiene measures:**

Remove contaminated clothing. Use suitable work clothing. Wash hands and face before breaks and when the job is done.

### **8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

## **Physical and chemical properties**

Appearance: liquid

Colour: Yellow

Granulometry: N/A

Odour: Piquant.

pH: N/A
Melting point/freezing point: -2 °C
Initial boiling point and boiling range: 160 °C
Flash point: 73 °C
Flammability (solid, gas): N/A
Upper/lower flammability or explosive limits: N/A
Vapour pressure: 1,86 hPa (20 °C)
Vapour density: N/A
Relative density: (20/4) 1,408
Solubility: Inmiscible with water.
Partition coefficient: n-octanol/water: N/A
Auto-ignition temperature: N/A
Decomposition temperature: N/A
Viscosity: N/A

## Stability and reactivity

### 10.1 Conditions which should be avoided:

The product is chemically stable under standar ambient conditions (room temperature).

### 10.2 Matter which should be avoided:

Water. Alcohols. Alkaline metals. Alkali-earth metals. Sulphoxides. Amides.

### 10.3 Hazardous decomposition products:

Hydrogen chloride.

### 10.4 Complementary information:

Moisture sensitive.

## Toxicological information

- **Acute toxicity:**

LD50 oral rat : 810 mg/kg

- **Dangerous effects for health:**

The data we have are insufficient for correct toxicological assessment. Based on the physico-chemical properties, the likely dangerous characteristics are: Very corrosive substance. Causes Burns in the mucosae, skin and eyes If fumes inhaled: Burns in the mucosae. Upon contact with the skin: burns Through contact with the eyes: burns Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## **Environmental information**

### **12.1 Toxicity:**

12.1.1 - EC50 test (mg/l):

Fish (HCl) 25 mg/l

Classification: Extr. toxic

12.1.2. - Receptor medium:

Risk for the water environment

Medium

Risk for the land environment Low

The ecotoxicity is due to the pH deviation.

### **12.2 Persistence and Degradability :**

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

### **12.3 Bioaccumulative potential:**

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

### **12.4 Mobility in soil :**

Data not available.

### **12.5 Assessment PBT and MPMB :**

Data not available.

### **12.6 Other possible effects on the environment:**

Ecotoxic effects due to the pH variation.

Do not allow it to enter soils or water channels.

## Considerations regarding elimination

### 13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

### 13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

## Information concerning transport

Overland (ADR):

Technical name: FUMARYL CHLORIDE

UN 1780 Class: 8 Packaging group: II (E)

By sea (IMDG):

Technical name: FUMARYL CHLORIDE

UN 1780 Class: 8 Packaging group: II

By air (ICAI-IATA):

Technical name: Fumaryl Chloride

UN 1780 Class: 8 Packaging group: II

Packaging instructions: CAO 855 PAX 851

## Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

# Other information

## Other precautionary statements

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.  
Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P321 Specific treatment (see on this label).  
P322 Specific measures (see on this label).  
P330 Rinse mouth.  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

## Labelling (65/548/CEE or 1999/45/CE)

R-phrases(s):	<b>R21/22</b> Harmful in contact with skin and if swallowed. <b>R37</b> Irritating to respiratory system. <b>R34</b> Causes burns.
S-phrases(s):	<b>S45</b> In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). <b>S36/37/39</b> Wear suitable protective clothing, gloves and eye/face protection. <b>S26</b> In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

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