

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : 5-Fluorouracil

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

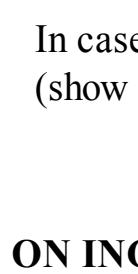
Acute toxicity, Oral (Category 3)

According to European Directive 67/548/EEC as amended.

Toxic if swallowed. Harmful to aquatic organisms.

### Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H301

Toxic if swallowed.

Precautionary statement(s)

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Hazard symbol(s)

T

Toxic

R-phrase(s)

R25

Toxic if swallowed.

R52

Harmful to aquatic organisms.

S-phrase(s)

S45

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

Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

: 5-FU  
2,4-Dihydroxy-5-fluoropyrimidine  
5-Fluoro-2,4(1H,3H)-pyrimidinedione

Formula

: C4H3FN2O2

Molecular Weight

: 130,08 g/mol

CAS-No.

EC-No.

Classification

Concentration

Fluorouracil

51-21-8

200-085-6

Acute Tox. 3; H301  
T, R25 - R52

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form

: powder

Colour

: white

### Safety data

pH

: no data available

Melting point

: 282 - 286 °C - dec.

Boiling point

: no data available

Flash point

: no data available

Ignition temperature

: no data available

Lower explosion limit

: no data available

Upper explosion limit

: no data available

Water solubility

: no data available

Partition coefficient:

: log Pow: -0,677

n-octanol/water

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

Heat.

### Materials to avoid

Strong oxidizing agents, Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen fluoride

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 230 mg/kg

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburnlike responses to edematous, vesiculated lesions, or bullae

### Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Fluorouracil)

### Reproductive toxicity

Reproductive toxicity - Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Specific Developmental Abnormalities: Other developmental abnormalities.

Reproductive toxicity - Hamster - Intramuscular

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Reproductive toxicity - rat - Intraperitoneal

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Specific Developmental Abnormalities: Other developmental abnormalities (e.g., stunted fetuses). Specific Developmental Abnormalities: Effects on Embryo or Fetus: Teratogenicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Effects on Embryo or Fetus: Abortion.

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