

Section 1: Identification
Product Name FLUOROURACIL USP

Commercial Name N/A

Product Use Not available.

Restrictions On Use Not available.

Product Code 55-1085

Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300
Section 2: Hazard(s) Identification
OSHA Haz Com: Carc. Cat. 2; R45 Muta. Cat. 2; R46 Repr. Cat. 2; R60 Repr. Cat. 2; R61

CFR 1910.1200
Signal Word DANGER

Hazard Statement(s) Toxic if swallowed. Cause skin irritation. May cause genetic defects. May cause cancer. May damage fertility or unborn child. Very toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):
Prevention

P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P280 Wear suitable protective clothing and gloves. P281 Use personal protective equipment as required.

Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302+P352 If ON SKIN: wash with plenty of soap and water. P308+P313 IF exposed or concerned: Get medical advice/attention. P330 Rinse mouth. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P391 Collect spillage.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container to hazardous or special waste collection point.

Section 3: Composition/Information on Ingredients
Substance/Mixture Substance

Components Fluorouracil USP (5 FU)

% By Weight 100

CAS# 51-21-8

Molecular Weight 130.08 g/mole

Chemical Formula C4H3FN2O2

Synonym(s) ADRUCIL * ARUMEL * EFFLUDERM (FREE BASE) * EFUDEX * 5-FLUORACIL (GERMAN) * 5-FLUOR-2,4-DIHYDROXYPYRIMIDIN (CZECH) * FLUOROBlastin * FLUOROPLEX * 5-FLUOROPYRIMIDINE-2,4-DIONE * 5-FLUORO-2,4-PYRIMIDINEDIONE * 5-FLUORO-2,4(1H,3H)-PYRIMIDINEDIONE * 5-FLUOR-2,4- PYRIMIDINDIOL (CZECH) * 5-FLUOR-2,4(1H,3H)-PYRIMIDINDION (CZECH) * FLUOROURACIL * 5-FLUOROURACIL * 5-FLUORURACIL (GERMAN) * FLURACIL FLURACILUM * FLURIL * FU * 5-FU * NSC-19893 * 2,4(1H,3H)- PYRIMIDINEDIONE, 5-FLUORO- * QUEROplex * RO 2-9757 * TIMAZIN * U-8953 * ULUP *

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
1) {5-}Fluorouracil	51-21-8	100	Not Available.	ORAL: Acute: 230 mg/kg [Rat]. 115 mg/kg [Mouse].

Section 4: First-Aid Measures

Inhalation	If inhaled, remove to fresh air, if not breathing, give artificial respiration. If breathing is difficult, give oxygen
Skin Contact	In case of skin contact, immediately wash skin with soap and copious amounts of water.
Eye Contact	In case of eye contact, immediately flush eyes with copious amounts of water for at least 15 minutes.
Ingestion	If swallowed, wash out mouth with water provided person is conscious. Call a physician. Remove and wash contaminated clothing promptly.
Symptoms/Effects	
Acute	Not available.
Delayed	Not available.
Immediate Medical Attention	
Not available.	

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Water spray. Carbon dioxide. Dry powder.

Unsuitable Extinguishing Media

Do not use a heavy water stream.

Products of Combustion

Incomplete combustion will generate poisonous carbon monoxide, carbon dioxide and other toxic gases.

Firefighters Special Equipment and Precautions

Surrounding fires: Use water spray or fog for cooling exposed containers. Protection against fire: Do not enter fire area without proper protective equipment, including respiratory protection. Special produces : Avoid (reject) fire-fighting water to enter environment. Prevent entry to sewers and public waters.

Section 6: Accidental Release Measures

General precautions: Remove ignition sources. Evacuate area. Personal precautions: Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Clean up methods : Clean spill promptly. To clean the floor and all objects contaminated by this material, use: sodium hypochlorite solution. Ensure adequate ventilation. Environment precautions: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Section 7: Handling and Storage

Personal protection : Avoid all unnecessary exposure. Ensure prompt removal from eyes, skin and clothing. Technical protective measures : Material should be handled in a laboratory hood whenever possible. Handling : Handle in accordance with good industrial hygiene and safety procedures. Storage : Keep container tightly closed in a cool, well ventilated place. Storage - away from : All heat sources, including direct sunlight. Open flame. Sources of ignition. Sparks. Incompatible materials.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Not available.
Engineering Controls	Not available.
Personal Protection	- Respiratory protection: Wear approved mask. In case of insufficient ventilation, wear suitable respiratory equipment. - Hand protection: Wear suitable gloves resistant to chemical penetration. - Skin protection: Wear suitable protective clothing. - Eye protection: Chemical goggles or safety glasses. Industrial hygiene: Provide local exhaust or general room ventilation. Material should be handled in a laboratory hood whenever possible.

Section 9: Physical and Chemical Properties

Appearance	white, powder.		
Odor	Not available.		
Odor Threshold	Not available.		
Melting Point	278-282	pH	4.5-5
Freezing Point	Not available.	Vapor Pressure	Not applicable.
Boiling Point/Range	Not available.	Vapor Density	Not available.
Decomposition temperature	Not available.	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available.	Evaporation Rate	Not available.
Flash Point	Not available.	Autoignition temperature	Not available.
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	Not available.		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	Not available.
Chemical Stability	Stable under normal conditions.
Hazardous Polymerization	Will not occur.
Conditions to Avoid	Sources of ignition. Heat. Light.
Incompatible Materials	Strong bases. Strong oxidizers
Hazardous Decomposition Products	Carbon monoxide. Nitrogen oxides. Carbon dioxide. Hydrogen fluoride. When heated to decomposition, emits dangerous fumes.

Section 11: Toxicological Information

RTECS Not available.

Acute Toxicity

Blood and lymphatic system disorders. Skin and subcutaneous tissue disorders. Hepatobiliary disorders. This material may induce blood disorders and/or aggravate pre-existing blood disorders. Immune system disorders. Can affect blood cell formation, astro intestinal disorders. Vomiting. Nausea.

Skin Corrosion/Irritation

Not available

Serious Eye Damage/Irritation

Not available

Respiratory or Skin Sensitization

Not available

Germ Cell Mutagenicity

Category 2: Substances which should be regarded as if they are carcinogenic to man.

Carcinogenicity

Category 2: Substances which should be regarded as if they are carcinogenic to man.

Reproductive Toxicity

Category 2: Substances which should be regarded as if they are carcinogenic to man.

Routes of Entry

Absorbed through skin. Inhalation. Ingestion.

Symptoms Related to Exposure

Not available

Potential Health Effects

Immune system disorders. Can affect blood cell formation, astro intestinal disorders. Vomiting. Nausea.

Target Organ(s)

Damage to liver.

Section 12: Ecological Information**Ecotoxicity**

Ecological effects information : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and Degradability

Not available

Bioaccumulative Potential

2%

Mobility in Soil

Not available

Other Adverse Effects

Avoid release to the environment

Section 13: Disposal Considerations**Waste Disposal**

Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations. This product contains hazardous components for the environment. Avoid release to the environment.

Disposal of Container

Not available

Other Considerations

Not available

Section 14: Transport Information**DOT Classification**M TRANSPORT INFORMALION Land transport Proper shipping name; TOXIC SOLID, ORGANIC, N.O.S. (Fluorouracil) UN No.:2811
ADR Class:6.1 ADR packing group: 111 IMDG-Marine pollution: Yes. Air transport Proper shipping name: TOXIC SOLID, ORGANIC,
N.O.S. (Fluorouracil) -UN No: 2811. IATA - Class or division: 6.1 - IATA Packing group: HI**Section 15: Regulatory Information****Regulations**

1'S REGULATORY INFORMATION Symbol(s) : T: Toxic N: Dangerous for the enviroment R Phrase(s) : R22: Harmful if swallowed.
R36/37/38: Irritating to eyes, respiratory system and skin. R45: May cause cancer. R46: May cause heritable genetic damge.
R50/53: Very toxic to aquatic organisms, may cause , long-term adverse effects in the aquatic environment. R60: May impair
fertility. R61: May cause harm to the unborn child. S Phrasefs) : 822: Do not breathe dust. S36/37/39: Wear suitable protective
clothing, gloves and eye/face protection. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the
label when possible) S53: Avoid exposure - obtain special instructions before use. S60: This material and its container must be
disposed of as hazardous waste. Carcinogenicity Category 2: Substances which should be regarded as if they are carcinogenic
to man. Mutagenicity Category 2: Substances which should be regarded as if they are carcinogenic to man. Toxic for
reproduction: Fertility : Category 2: Substances which should be regarded as if: they are carcinogenic to man. Toxic for
reproduction: unborn child Category 2: Substances which should be regarded as if they cause developmental toxicity to
humans.

Other

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Section 16: Other Information



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

FLUOROURACIL USP

55-1085

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. NANTONG GENERAL PHARMACEUTICAL FACTORY SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.