

## SAFETY DATA SHEET

Creation Date 16-November-2010

Revision Date 19-January-2018

Revision Number 3

### 1. Identification

**Product Name** (+)-5-Fluoro-2'-deoxyuridine

**Cat No. :** AC227600000; AC227600025; AC227601000; AC227605000

**CAS-No** 50-91-9  
**Synonyms** Floxuridine; FUDR; 2'-Deoxy-5-fluorouridine

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

##### **Importer/Distributor**

Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

##### **WHMIS 2015 Classification**

Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

<b>Acute oral toxicity</b>	Category 3
<b>Skin Corrosion/irritation</b>	Category 2
<b>Serious Eye Damage/Eye Irritation</b>	Category 2
<b>Germ Cell Mutagenicity</b>	Category 2

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Toxic if swallowed  
Causes skin irritation  
Causes serious eye irritation  
Suspected of causing genetic defects



**Precautionary Statements**

**Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection

**Response**

IF SWALLOWED: Immediately call a POISON CENTER/doctor  
IF ON SKIN: Wash with plenty of soap and water  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
IF exposed or concerned: Get medical advice/attention  
Rinse mouth  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. Composition/Information on Ingredients**

Component	CAS-No	Weight %
Floxuridine	50-91-9	>95

**4. First-aid measures**

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. Obtain medical attention. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If not breathing, give artificial respiration.

**Ingestion** Clean mouth with water. Get medical attention.

**Most important symptoms/effects** No information available.

**Notes to Physician** Treat symptomatically

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

**Unsuitable Extinguishing Media** No information available

Flash Point Method - No information available

Autoignition Temperature Explosion Limits Upper Lower Sensitivity to Mechanical Impact Sensitivity to Static Discharge

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO2) Gaseous hydrogen fluoride (HF)

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA table with columns: Health (3), Flammability (1), Instability (1), Physical hazards (N/A)

6. Accidental release measures

Personal Precautions Environmental Precautions Ensure adequate ventilation. Use personal protective equipment. See Section 12 for additional ecological information.

Methods for Containment and Clean Up Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

7. Handling and storage

Handling Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust. Remove and wash contaminated clothing before re-use. Do not ingest. Use only in area provided with appropriate exhaust ventilation. Wash thoroughly after handling.

Storage Keep in a dry place. Keep container tightly closed. Keep refrigerated.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Hand Protection Goggles Protective gloves

Table with columns: Glove material (Nitrile rubber, Neoprene), Breakthrough time (See manufacturers recommendations), Glove thickness, Glove comments (Splash protection only)

Natural rubber PVC	-
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Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

**Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Recommended Filter type:** Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls**

No information available.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

**9. Physical and chemical properties**

<b>Physical State</b>	Powder Solid
<b>Appearance</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	148 - 153 °C / 298.4 - 307.4 °F
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid,gas)</b>	No information available
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	No information available
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	Not applicable
<b>Molecular Formula</b>	C9 H11 F N2 O5
<b>Molecular Weight</b>	246.19

**10. Stability and reactivity**

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Incompatible products.
<b>Incompatible Materials</b>	Strong oxidizing agents, Strong bases

**Hazardous Decomposition Products** Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Gaseous hydrogen fluoride (HF)

**Hazardous Polymerization** No information available.

**Hazardous Reactions** None under normal processing.

**11. Toxicological information**

**Acute Toxicity**

**Product Information**

**LD50 Oral VALUE** 215 mg/kg (RAT)

**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Floxuridine	LD50 = 215 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Floxuridine	50-91-9	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** May cause heritable genetic damage

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**12. Ecological information**

**Ecotoxicity**

Do not empty into drains.

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

**13. Disposal considerations**

**Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**14. Transport information**

**DOT**

UN-No UN2811  
Proper Shipping Name TOXIC SOLIDS, ORGANIC, N.O.S.  
Hazard Class 6.1  
Packing Group III

**TDG**

UN-No UN2811  
Proper Shipping Name TOXIC SOLIDS, ORGANIC, N.O.S.  
Hazard Class 6.1  
Packing Group III

**IATA**

UN-No 2811  
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.  
Hazard Class 6.1  
Packing Group III

**IMDG/IMO**

UN-No 2811  
Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.  
Hazard Class 6.1  
Packing Group III

**15. Regulatory information**

**International Inventories**

Component	DSL	NDSL	TSCA	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Floxuridine	-	-	-	200-072-5	-		-	-	-	-	-

**Canada**

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

**16. Other information**

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**Revision Summary** This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**