

9-1-05

204-2.30-s0323F11.ps



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 03/23/2005
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Version 1.30

Section 1 - Product and Company Information

Product Name: Folic acid, approx. 98%
Product Number: F8758
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Table with 5 columns: Substance Name, CAS #, SARA 313, EC no, Annex I Index Number. Row 1: FOLIC ACID, 59-30-3, None, 200-419-0, None.

Formula: C19H19N7O6
Synonyms: Acifolic, Cytofol, Folacid, Folacin, Folbal, Folcidin, Foliamin, Folipac, Folsan, Folsaure, Folvite, Glutamic acid, N-(p-((2-amino-4-hydroxy-6-pteridiny)l)methyl)amino)benzoyl)-, L-, Glutamic acid, pteroyl-, L-, Incafolic, Kyselina listova (Czech), Liver Lactobacillus casei factor, Mittafol, NSC 3073, 4-Pteridinol, 2-amino-6-(p-((1,3-dicarboxypropyl)carbamoyl)anilino)methyl)-, Pteroylglutamic acid, Pteroyl-L-glutamic acid, Pteroylmonoglutamic acid, Pteroyl-L-monoglutamic acid, USAF CB-13, Vitamin B11, Vitamin Bc, Vitamin M

Section 3 - Hazards Identification

HMIS Rating: Health: 0, Flammability: 0, Reactivity: 1

NFPA Rating: Health: 0, Flammability: 0, Reactivity: 1

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure: In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media

Suitable: Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable: Keep tightly closed.

Special Requirements

Light sensitive.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory

Wear dust mask.

Hand

Protective gloves.

Eye

Chemical safety goggles.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	
Physical State	Color
Solid	Yellow
Molecular Weight:	441.4 AMU
pH	N/A
BP/BP Range	N/A
MP/MP Range	> 285 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	8 %
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Optical Rotation	Degree of Rotation: +24 - +20 (+/-2)
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.
Conditions of Instability
Light sensitive.
Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
May cause skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
May cause eye irritation.
Inhalation
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion
May be harmful if swallowed.

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

RTECS Number: LP5425000

Toxicity Data

Intravenous - Rat: 500 MG/KG (LD50)

Oral - Mouse: 10000 mg/kg (LD50)

Intraperitoneal - Mouse: 85 MG/KG (LD50)

Remarks: Behavioral: Convulsions or effect on seizure threshold.
Behavioral: Muscle weakness.
Behavioral: Coma.

Intravenous - Mouse: 282 MG/KG (LD50)

Intravenous - Rabbit: 410 MG/KG (LD50)

Intravenous - Guinea pig: 120 MG/KG (LD50)

Chronic Exposure - Teratogen

<u>Species</u>	<u>Dose</u>	<u>Route of Application</u>	<u>Exposure Time</u>
Rat	96600 MG/KG	Oral	(1-21D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).			
Rat	150 MG/KG	Parenteral	(10D PREG)
Result: Effects on Embryo or Fetus: Cytological changes (including somatic cell genetic material).			

Chronic Exposure - Mutagen

<u>Species</u>	<u>Dose</u>	<u>Route</u>	<u>Mutation test</u>
Rat	150 MG/KG	Intraperitoneal	Unscheduled DNA synthesis
Rat	10 UG/L		lymphocyte Cytogenetic analysis
Mouse	150 MG/KG	Subcutaneous	Unscheduled DNA synthesis
Mouse	250 MG/KG	Intraperitoneal	Unscheduled DNA synthesis

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

Canada Regulatory Information**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.