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# SAFETY DATA SHEET

**Revision Number: G2 Preparation Date: 7/2/15** Revision date 1/10/2019

# 1. Identification

Product identifier

Product code: F1079

**Product Name:** FOLIC ACID, POWDER, FCC

Other means of identification

N-(4-(((2-Amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)-L-glutamic Synonyms:

acid

4-Pteridinol, 2-amino-6-((p-((1,3-dicarboxypropyl)carbamoyl)anilino)methyl)-

Acifolic Folacid Folacin Folate Folbal Folcidin Folcysteine **Folettes** Foliamin Folicet

**Folipac** Folsan Folsaure Folsay Folvite

Glutamic acid, N-(p-(((2-amino-4-hydroxy-6-pteridinyl)methyl)amino)benzoyl)-, L-

Glutamic acid,

N-(p-(((2-amino-4-hydroxypyrimido(4,5-b)pyrazin-6-yl)methyl)amino)benzoyl)-, L

Glutamic acid, pteroyl-, L-

Incafolic

L-Glutamic acid,

N-(4-(((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)-

N-(p-(((2-Amino-4-hydroxy-6-pteridinyl)methyl)amino)benzoyl)-L-glutamic acid

Pterovl-L-glutamic acid Pteroyl-L-monoglutamic acid

Pteroylglutamic acid Pterovlmonoglutamate Pteroylmonoglutamic acid

Vitamin B9 Vitamin M L-Glutamic acid,

N-(4-(((2-amino-3,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)-

CAS #: 59-30-3 RTECS# LP5425000 CI#: Not available

Recommended use of the chemical and restrictions on use

Product code: F1079 Product name: FOLIC ACID,

Recommended use: Vitamin.

Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena. CA 90248

(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person:Tom Tyner (USA - West Coast)Contact Person:Ibad Tirmiz (USA - East Coast)

# 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Label elements

Not classified			

# Hazards not otherwise classified (HNOC)

Not Applicable

# Other hazards

Not available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Folic Acid	59-30-3	100

# 4. FIRST AID MEASURES

#### First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention if irritation develops. Consult a physician if necessary.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms

persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

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**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

**Symptoms** May cause eye/skin irritation

Health injuries are not known or expected under normal use

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

**Protection of first-aiders** 

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media** 

Suitable Extinguishing Media: Dry powder. Carbon dioxide (CO2). Water spray mist or

foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NOx).

Specific hazards May be combustible at high temperatures.

**Special Protective Actions for Firefighters** 

Specific Methods: No information available

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing. Remove all sources of ignition. Avoid dust formation. Avoid dispersal of

dust in the air.

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent

spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated

surface thoroughly.

#### 7. HANDLING AND STORAGE

Precautions for safe handling

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#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

# **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Protect from light. Sensitive to light. Store in light-resistant containers.

# **Incompatible Materials:**

Oxidizing agents Reducing agents

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

# National occupational exposure limits

#### **United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Folic Acid	59-30-3	None	None	None	None

#### Canada

С	component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
F	Folic Acid	59-30-3	None	None	None	None

#### **Australia and Mexico**

Component	CAS No	Australia	Mexico
Folic Acid	59-30-3	None	None

#### **Appropriate engineering controls**

**Ensure** Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

# **Personal Protective Equipment**

**Eye protection:** Goggles or Safety glasses with side-shields.

**Skin and body protection:** Chemical resistant apron

Gloves

Long sleeved clothing

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**Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to

the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified

respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands and face before breaks

and immediately after handling the product When using, do not eat, drink or

smoke.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Color:

Solid Powder. Yellow. Yellow Brown. Yellow-orange.

Odor:TasteFormulaOdorless.Tasteless.C19H19N7O6

Molecular/Formula weight (g/mole): Flammability (solid, gas) Flashpoint (°C/°F):

441.4 g/mole no data available No information available

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%):

Not available No information available No information available

Upper Explosion Limit (%): Melting point/range(°C/°F): Decomposition temperature(°C/°F): No information available >285°C/>545°F No information available

Boiling point/range(°C/°F): Bulk density: Density (g/cm3):

No information available

No information available

No information available

Specific gravity: pH Vapor pressure @ 20°C (kPa):

No information available 
No information available 
No information available

Evaporation rate: Vapor density: VOC content (g/L):
No information available No information available No information available

Odor threshold (ppm): Partition coefficient Viscosity:

No information available (n-octanol/water): No information available

-2.81

Miscibility: Solubility:

Very slightly soluble in hot water

Very soluble in Methanol

Insoluble in diethyl ether, acetone.

Insoluble in Chloroform Insoluble in Benzene

Very slightly soluble in Ethanol
Very slightly soluble in Butanol
Relatively soluble in Acetic Acid,
Phenol, Pyridine, and in solutions of
alkali hydroxides and carbonates.
Solubility in water: 0.0016 mg/ml water

@25 deg C, 1% in boiling water

# 10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents Reactive with reducing agents

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**Chemical stability** 

Stability: Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended

storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

<u>Conditions to avoid:</u> Heat. Exposure to light. Avoid dust formation. Incompatible materials.

Incompatible Materials: Oxidizing agents

Reducing agents

Hazardous decomposition

products:

Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx).

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

#### **Principal Routes of Exposure:**

Inhalation. Ingestion.

# **Acute Toxicity**

#### **Component Information**

Folic Acid
CAS No 59-30-3

LD50/oral/rat = No information available

LD50/oral/mouse = 10000 mg/kg Oral LD50 Mouse

**LD50/dermal/rabbit** = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50information = No information available

#### **Product Information**

LD50/oral/rat =

Value - Acute Tox = No information available

LD50/oral/mouse =

Value - Acute Tox Oral = 10000 mg/kg

LD50/dermal/rabbit

Value - Acute Tox = No information available

LD50/dermal/rat

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#### VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

**Symptoms** 

**Skin Contact:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

**Inhalation** May cause irritation of respiratory tract.

**Ingestion**No information available. Health injuries are not known or expected under normal

use.

**Aspiration hazard** No information available.

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

**Chronic Toxicity** No information available.

**Sensitization:** No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Folic Acid	59-30-3	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

**Specific Target Organ Toxicity** 

**STOT - single exposure**STOT - repeated exposure
No information available.
No information available.

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Target Organs: No information available.

# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

**Ecotoxicity effects:** No data available.

Persistence and degradability: No information available

**Bioaccumulative potential:** No information available.

Mobility in soilNo information availableOther adverse effectsNo information available.

# 13. DISPOSAL CONSIDERATIONS

# **Disposal Methods**

#### Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

# Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Folic Acid	59-30-3				None

# 14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Class
Packing group:
No information available

Number

Marine PollutantNo data availableDOT RQ (lbs):No information availableSpecial ProvisionsNo Information availableSymbol(s):No information availableDescription:No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
Packing Group:
Marine Pollutant
Description:
No information available

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**ADR** 

UN Number Not regulated

Proper Shipping Name:
Transport hazard class(es)
Packing group
Subsidiary Risk:

No information available
No information available
No information available

**IMDG** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

RID

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group

No information available
No information available
No information available
No information available

ICAO (air)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
Packing Group:

No information available
No information available
No information available

**IATA** 

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group
Precautionary Statements No information available
No information available
No information available
IF exposed or concerned

Response

Special Provisions No information available

# 15. REGULATORY INFORMATION

# **International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Folic Acid	59-30-3	PresentACTIV E	Present KE-01305	Present	Not present	Present	Present	Present 200-419-0

# **U.S. Regulations**

Folic Acid

FDA - Direct Food Additives 21 CFR 172.345

FDA - 21 CFR - Total Food Additives 101.79, 101.9, 107.100, 137.165, 137.185, 137.235, 137.260, 137.305, 137.350, 139.115,

- List Sourced from EAFUS 139.122, 139.155, 172.345, 172.896

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

**Chemicals Known to the State of California to Cause Cancer:** 

Product code: F1079 Product name: FOLIC ACID, POWDER. FCC

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

# Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
Folic Acid	59-30-3	Not Listed	Not Listed	Not Listed	Not Listed

# **CERCLA/SARA**

Component	CAS No	CERCLA -	Section 302	Section 302	Section 313 -	Section 313 -
		Hazardous	Extremely	Extremely	Chemical Category	Reporting
		Substances and	Hazardous	Hazardous		de minimis
		their Reportable	Substances	Substances and		
		Quantities	and TPQs	RQs		
Folic Acid	59-30-3	None	None	None	None	None

#### U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Folic Acid	59-30-3	Not Applicable	Not Applicable

#### Canada

#### WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification

Not a dangerous product according to HPR classification criteria.

Information:

Component Folic Acid 59-30-3 ( 100 ) WHMIS 2015 Hazard Classification

Not a dangerous product according to HPR classification criteria

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

# **DSL/NDSL**

Component	CAS No	Canada (DSL)	Canada (NDSL)
Folic Acid	59-30-3	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Folic Acid	59-30-3	Not listed
Component		CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Folic Acid	59-30-3	Not listed

#### **EU Classification**

# EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Folic Acid	59-30-3	

EU - CLP (1272/2008)

Product code: F1079 Product name: FOLIC ACID, POWDER, FCC

#### R-phrase(s)

not determined (not applicable)

#### S -phrase(s)

none

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Folic Acid	59-30-3		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

#### Indication of danger:

None

# **16. OTHER INFORMATION**

Preparation Date: 7/2/15
Revision date 1/10/2019
Prepared by: Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the

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**End of Safety Data Sheet** 

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