

## SAFETY DATA SHEET

Preparation Date: 11/14/2019

Revision date 11/14/2019

Revision Number: G1

### 1. IDENTIFICATION

**Product identifier**

**Product code:** H1098  
**Product Name:** 5-HYDROXY-L-TRYPTOPHAN

**Other means of identification**

**Synonyms:** Tryptophan, 5-hydroxy-, L-  
 L-5-Hydroxytryptophan  
 Oxitriptan  
 Pretonine  
 Quietim  
 5-HTP  
**CAS #:** 4350-09-8  
**RTECS #** YN7110000  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Antidepressant. Appetite suppressant. Sleep aid. Drug. Research and Development.  
**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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

**Label elements**

Danger

**Hazard statements**

Toxic if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation

**Hazards not otherwise classified (HNOC)**

May cause reproductive toxicity and/or fetotoxicity/teratogenic based on animal data. No human data available

**Other hazards**

Not available

**Precautionary Statements - Prevention**

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  
Avoid breathing dust  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
IF ON SKIN: Wash with plenty of water  
If skin irritation occurs: Get medical attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
IF SWALLOWED: Immediately call a POISON CENTER or physician  
Rinse mouth

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
5-Hydroxy-L-tryptophan	4350-09-8	100

**4. FIRST AID MEASURES**

Product code: H1098

Product name:  
5-HYDROXY-L-TRYPTOPHAN

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## First aid measures

<b>General Advice:</b>	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. First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
<b>Eye Contact:</b>	Flush eyes with water for 15 minutes. Get medical attention.
<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. <b>WARNING!</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion:</b>	Toxic if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

## Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Causes serious eye irritation Causes skin irritation May cause irritation of respiratory tract May cause irritation to mucous membranes May affect behavior/central nervous system (somnolence, tremor) It may affect the kidneys
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## Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician:</b>	Treat symptomatically.
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## 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

<b>Suitable Extinguishing Media:</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray mist, or foam. The product is not flammable.
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<b>Unsuitable Extinguishing Media:</b>	No information available.
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### Specific hazards arising from the chemical

<b>Hazardous combustion products</b>	Carbon monoxide. Carbon dioxide (CO <sub>2</sub> ). Nitrogen oxides (NO <sub>x</sub> ).
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<b>Specific hazards</b>	May be combustible at high temperatures.
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### Special Protective Actions for Firefighters

<b>Specific Methods:</b>	No information available
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**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:** Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid dust formation. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### 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. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical Measures/Precautions:**

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

**Safe Handling Advice:**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not breathe dust. Do not ingest. Keep away from heat and sources of ignition. 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.

**Incompatible Materials:**

Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

**United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
5-Hydroxy-L-tryptophan	4350-09-8	None	None	None	None

**Canada**

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
5-Hydroxy-L-tryptophan	4350-09-8	None	None	None	None

### Australia and Mexico

Component	CAS No	Australia	Mexico
5-Hydroxy-L-tryptophan	4350-09-8	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. In case of insufficient ventilation, wear suitable respiratory equipment.

### 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
- Respiratory protection:** Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid	<b>Appearance:</b> Crystals.	<b>Color:</b> Pale Yellow. White.
<b>Odor:</b> No information available.	<b>Taste</b> No information available.	<b>Formula</b> C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>3</sub>
<b>Molecular/Formula weight (g/mole):</b> 220.23	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> No information available
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 270°C/518°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> 0.902

**Specific gravity:**  
No information available

**pH**  
No information available

**Vapor pressure @ 20°C (kPa):**  
No information available

**Evaporation rate:**  
No information available

**Vapor density:**  
No information available

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
No information available

**Partition coefficient  
(n-octanol/water):**  
-1.573

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Slightly soluble in water

## 10. STABILITY AND REACTIVITY

**Reactivity**  
No information available

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

### 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:**  
Ingestion. Eyes. Inhalation. Skin.

### Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 243 mg/kg

### Component Information

5-Hydroxy-L-tryptophan

CAS No 4350-09-8

**LD50/oral/rat** = 243 mg/kg Oral LD50 Rat

**LD50/oral/mouse** = 1708 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 LC50 information =** 285 mg/kg oral LD50 rabbit  
 2.86 mg/kg oral TDLo human  
 2.14 mg/kg oral TDLo man

**Product Information**

**LD50/oral/rat =**  
**Value - Acute Toxicity =** 243 mg/kg

**LD50/oral/mouse =**  
**Value - Acute Tox =** 1708 mg/kg

**LD50/dermal/rabbit**  
**Value - Acute Toxicity =** No information available

**LD50/dermal/rat**  
**VALUE - Acute Tox =** 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:** Causes skin irritation. May cause burning or stinging sensation, redness of the skin, inflammation of the skin.

**Eye Contact:** Causes serious eye irritation. Redness and pain.

**Inhalation** May cause irritation of the respiratory tract and mucous membranes irritation.

**Ingestion** May affect behavior/central nervous system (somnolence, convulsions, tremor, ataxia). May cause digestive (gastrointestinal) tract irritation. May affect urinary system (kidneys). May affect the endocrine system.

**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	Australia - Prohibited Carcinogenic

						<b>Substances</b>	<b>Substances</b>
5-Hydroxy-L-tryptophan	4350-09-8	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** Experiments have shown reproductive toxicity effects on laboratory animals May cause adverse effects on newborn based on animal data

**Reproductive Effects:** May cause adverse reproductive effects (fetotoxicity) and birth defects (teratogenic- fetal, central nervous system/ behavior and developmental abnormalities) predominately base on animal data.

**Developmental Effects:** May cause adverse developmental effects based on animal data

May cause adverse effects on newborn based on animal data

**Teratogenic Effects:** May cause birth defects (teratogenic effects) based on animal test data

**Specific Target Organ Toxicity**

**STOT - single exposure** central nervous system.

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

**Target Organs:** Respiratory system.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility in soil** No information available

**Other adverse effects** No 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. Do not re-use empty containers  
Dispose of as unused product.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
5-Hydroxy-L-tryptophan	4350-09-8	None	None	None	None

**14. TRANSPORT INFORMATION**



**DOT**

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solids, organic, n.o.s.  
**Hazard Class** 6.1  
**Subsidiary Class** No information available  
**Packing group:** III  
**Emergency Response Guide Number** 154  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** IB8, IP3, T1, TP33  
**Symbol(s):** [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.  
**Description:** UN2811, Toxic solids, organic, n.o.s., 6.1, III

**TDG (Canada)**

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Hazard Class** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant** No Information available  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III

**ADR**

**UN Number** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Transport hazard class(es)** 6.1  
**Packing group** III  
**Subsidiary Risk:** No information available  
**Special Provisions** 274, 614  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III

**IMDG**

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solids, organic, n.o.s.  
**Hazard Class:** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant** No information available  
**EMS:** F-A  
**Special Provisions** 223, 274  
**Description** UN2811, Toxic solid, organic, n.o.s. (5-HYDROXY-L-TRYPTOPHAN), 6.1, III

**RID**

**UN Number** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Transport hazard class(es)** 6.1  
**Subsidiary Risk:** No information available  
**Packing group** III  
**Special Provisions** 274, 614  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III

**ICAO (air)**

**UN-No:** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.

**Hazard Class** 6.1  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III  
**Special Provisions** A3, A5

**IATA**

**UN Number** UN2811  
**Proper Shipping Name:** Toxic solid, organic, n.o.s.  
**Transport hazard class(es)** 6.1  
**Subsidiary Risk:** No information available  
**Packing group** III  
**Precautionary Statements - Response** 6L  
**Special Provisions** No information available  
**Description:** UN2811, Toxic solid, organic, n.o.s., 6.1, III

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
5-Hydroxy-L-tryptophan	4350-09-8	PresentACTIVE	Present KE-20926	Present	Present (9)-2171	Not listed	Not listed	Present 224-411-1

**U.S. Regulations**

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

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

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 Reproductive Toxicity	Female Reproductive Toxicity:
5-Hydroxy-L-tryptophan	4350-09-8	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
5-Hydroxy-L-tryptophan	4350-09-8	None	None	None	None	None

**U.S. TSCA**

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
5-Hydroxy-L-tryptophan	4350-09-8	Not Applicable	Not Applicable

**Canada**

**Product code:** H1098

**Product name:**  
5-HYDROXY-L-TRYPTOPHAN

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## WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has not 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)
5-Hydroxy-L-tryptophan	4350-09-8	Not Listed	Present

Component	CAS No	CEPA Schedule I - Toxic Substances
5-Hydroxy-L-tryptophan	4350-09-8	Not listed

Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
5-Hydroxy-L-tryptophan	4350-09-8	Not listed

## EU Classification

### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
5-Hydroxy-L-tryptophan	4350-09-8	

### EU - CLP (1272/2008)

### R-phrase(s)

R25 - Toxic if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

### S -phrase(s)

S 7 - Keep container tightly closed.

S36 - Wear suitable protective clothing

S28 - After contact with skin, wash immediately with plenty of water

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
5-Hydroxy-L-tryptophan	4350-09-8		No information	

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

### Indication of danger:

T - Toxic

Xi - Irritant

**T****Xi****16. OTHER INFORMATION**

**Preparation Date:** 11/14/2019  
**Revision date** 11/14/2019  
**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 completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**