

## Safety Data Sheet

### Section 1: Product & Company Identification

<b>Product Name:</b>	Citrinin
<b>Product #:</b>	C-1109
<b>Synonyms:</b>	NSC 186; (-)-Citrinin; CTN
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Citrinin	518-75-2	208-257-2	≥98

### Section 3: Hazards Identification

#### Symbols



#### HMIS Rating

Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
3		0	0

#### NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
4	0	0

### Section 4: First Aid Measures

<b>General Overview:</b>	Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.
<b>Inhalation:</b>	Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation.

<b>Skin:</b>	Immediately wash with water and soap and rinse thoroughly.
<b>Eyes:</b>	Rinse opened eye for several minutes under running water. Then consult a doctor.
<b>Ingestion:</b>	Do not induce vomiting; immediately call for medical help.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	Product is not flammable.
<b>Extinguishing Media:</b>	Use firefighting measures that suit the environment. A solid water stream may be inefficient.
<b>Hazardous thermal (de)composition products:</b>	No data available
<b>Special Fire Fighting Procedures:</b>	Mouth respiratory protective device.
<b>Flash Point:</b>	No data available


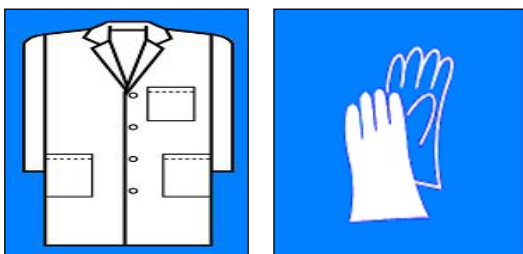

## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Not required.
<b>Environmental Precautions:</b>	Do not allow to enter sewers/surface or ground water.
<b>Methods for Clean-up:</b>	Dispose contaminated material as waste according to Section 13. Ensure adequate ventilation.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed. Store in accordance with information listed on the product insert. Recommended storage temperature: -20°C
<b>Handling:</b>	Thorough dedusting. Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Keep respiratory protective device available.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.</p>
<b>Skin and Body:</b>	 <p>Protective gloves and lab coat.</p>
<b>Eyes:</b>	 <p>Not required.</p>
<b>Ventilation/Engineering Measures:</b>	Ensure adequate ventilation.
<b>Hygiene:</b>	Follow standard good industrial hygiene practices.
<b>Other:</b>	Contains no substances with occupational exposure limit values.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Solid. Characteristic odor.
<b>Formula</b>	$C_{13}H_{14}O_5$
<b>Molecular Wt.</b>	250.3
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available

<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	DMF (30 mg/mL); DMF:PBS [pH 7.2] [1:1] (0.5 mg/mL); DMSO (20 mg/mL); Ethanol (2 mg/mL)
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	No decomposition if used according to specifications. Carbon oxides.
<b>Materials to Avoid:</b>	Strong bases, strong oxidizing agents
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	DJ2275000
<b>ACUTE Toxicity:</b>	Oral LD50: 105 mg/kg (mouse) Intraperitoneal LD50: 35 mg/kg (mouse) Intraperitoneal LD50: 50 mg/kg (rat) Subcutaneous LD50: 73 mg/kg (mouse) Subcutaneous LD50: 67 mg/kg (rat)
<b>CHRONIC Toxicity:</b>	No data available
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	IARC: 3 AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA. EPA: No classification on carcinogenic data is available from EPA

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	Water hazard class 2 (Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available

<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	No data available

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
<b>Contaminated Packaging:</b>	Disposal must be made according to official regulations.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	UN2811
<b>ADR / RID (LAND):</b>	N/A
<b>DOT regulations:</b>	<p>Toxic solids, organic, n.o.s. (Citrinin)            Class 6.1 Toxic substances            Label 6.1            Packing group II</p> <p>Quantity limitations:            On passenger aircraft/rail: 25 kg            On cargo aircraft only: 100 kg</p>
<b>IMDG/IMO (SEA):</b>	<p>TOXIC SOLID, ORGANIC, N.O.S. (Citrinin)            Class 6.1 Toxic substances            Label 6.1            Packing group II</p> <p>Limited quantities (LQ) 500 g</p> <p>Excepted quantities (EQ) Code: E4            Maximum net quantity per inner packaging: 1 g            Maximum net quantity per outer packaging: 500 g</p>
<b>IATA/DGR (AIR):</b>	<p>Toxic solid, organic, n.o.s. (Citrinin)            Class 6.1 Toxic substances            Label 6.1            Packing group II</p> <p>Remarks: When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.</p>
<b>Special Provisions:</b>	Warning: Toxic substances

	Hazard identification number (Kemler code): 60 EMS Number: F-A,S-A Stowage Category: B
--	----------------------------------------------------------------------------------------------

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	Danger! H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled. H351 Suspected of causing cancer.
<b>Risk Phrases:</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust/fume/gas/mist/vapors/spray P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection.
<b>Safety Phrases:</b>	P301+P310 If swallowed: Immediately call a poison center/doctor. P321 Specific treatment (see on this label). P330 Rinse mouth. P302+P352 If on skin: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/attention. P312 Call a poison center/doctor if you feel unwell. P361+P364 Take off immediately all contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA: Not listed California Proposition 65: No products were found
<b>U.S. Federal Regulations:</b>	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found.  Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found.



	Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: Acute toxicity - oral (Cat. 3); Acute toxicity - dermal (Cat. 3); Acute toxicity - inhalation (Cat. 3); Carcinogenicity (Cat. 2)
<b>WHMIS (Canada):</b>	N/A

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*