

## Safety Data Sheet

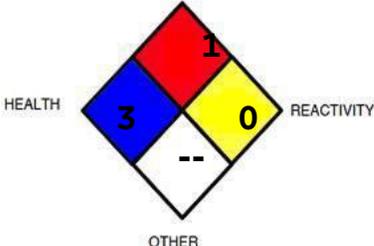
### Section 1: Product & Company Identification

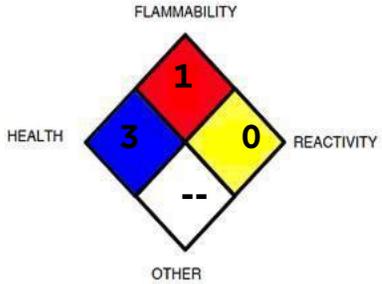
<b>Product Name:</b>	Ochratoxin A
<b>Product #:</b>	O-1034
<b>Synonyms:</b>	N-[(3R)-(5-Chloro-8-hydroxy-3-methyl-1-oxo-7- isochromanyl)carbonyl]-L-phenylalanine; OCA
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Ochratoxin A	303-47-9	-	

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p>FLAMMABILITY</p> <p>HEALTH</p> <p>REACTIVITY</p> <p>OTHER</p> 

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	<p>Immediate medical attention is required. If symptoms persist, call a physician.</p> <p>Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.</p> <p>Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.</p>
<b>Inhalation:</b>	<p>Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.</p>
<b>Skin:</b>	<p>Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.</p>
<b>Eyes:</b>	<p>Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. Call a physician immediately. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. If symptoms persist, call a physician.</p>
<b>Ingestion:</b>	<p>Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink plenty of water afterwards. Call a physician.</p>
	<p>See section 11 for more detailed information on health effects &amp; symptoms.</p>

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	<p>Wear self-contained breathing apparatus and protective suit.</p>
<b>Extinguishing Media:</b>	<p>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p>

<b>Hazardous thermal (de)composition products:</b>	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ), Phosgene
<b>Special Fire Fighting Procedures:</b>	Thermal decomposition can lead to release of toxic/corrosive gases and vapors.
<b>Flash Point:</b>	336.27°C

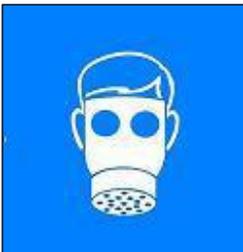
## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.
<b>Methods for Clean-up:</b>	<p>Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.</p> <p>Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.</p>

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Store at 2 - 8°C.
<b>Handling:</b>	<p>Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.</p> <p>Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/ vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.</p> <p>Corrosive hazard. Wear protective gloves/clothing and eye/face protection.</p> <p>Thermal decomposition can lead to release of toxic/corrosive gases and vapors.</p>

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.</p>
<b>Skin and Body:</b>	  <p>Wear protective gloves and protective clothing.</p>
<b>Eyes:</b>	 <p>Tight sealing safety goggles. Face protection shield.</p>
<b>Ventilation/Engineering Measures:</b>	<p>Ensure adequate ventilation.</p>
<b>Hygiene:</b>	<p>Handle in accordance with good industrial hygiene and safety practice.</p>
<b>Other:</b>	<p>N/A</p>

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Solid
<b>Formula</b>	C <sub>20</sub> H <sub>18</sub> ClNO <sub>6</sub>
<b>Molecular Wt.</b>	403.81
<b>Melting Pt.</b>	169°C
<b>Boiling Pt.</b>	632.42°C
<b>Density:</b>	1.4 g/cm <sup>3</sup>
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Soluble in chloroform (9.80 - 10.20 mg/ml), methanol (10 mg/ml), ethanol (50 mM), and DMSO (100 mM).
<b>Flash Point:</b>	336.27°C
<b>Partition Coefficient</b>	4.70

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ), Phosgene
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	Extremes of temperature and direct sunlight

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	ATEmix (oral) = 5 mg/kg
<b>CHRONIC Toxicity:</b>	Prolonged or repeated exposure increases the risk. Possible risk of irreversible effects. Avoid repeated exposure.  Carcinogenicity: Ochratoxin A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	IARC: Group 2B 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: Reasonably Anticipated 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>	May cause long lasting harmful effects to aquatic life
<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>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging:</b>	Do not reuse container. Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	UN3462
<b>ADR / RID (LAND):</b>	N/A
<b>DOT regulations:</b>	UN3462 Hazard Class: 6.1 Packing Group: II Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s. Description: UN3462, Toxins, extracted from living sources, solid, n.o.s. (Ochratoxin A), 6.1, II, POISON Emergency Response Guide Number: 153
<b>IMDG/IMO (SEA):</b>	UN3462 Hazard Class: 6.1 Packing Group: II Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s. Description: UN3462, Toxins, extracted from living sources, solid, n.o.s. (Ochratoxin A), 6.1, II Special Provisions: 210, 274 EmS-No: F-A, S-A
<b>IATA/DGR (AIR):</b>	UN3462 Hazard Class: 6.1 Packing Group: II Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s. Description: UN3462, Toxins, extracted from living sources, solid, n.o.s. (Ochratoxin A), 6.1, II
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	Danger!
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	<p>Fatal if swallowed          Causes serious eye irritation          May cause cancer          Suspected of damaging fertility or the unborn child          May cause drowsiness or dizziness          May cause damage to organs through prolonged or repeated exposure          May be fatal if swallowed and enters airways</p>
<b>Risk Phrases:</b>	<p>Obtain special instructions before use          Do not handle until all safety precautions have been read and understood          Use personal protective equipment as required          Wash face, hands and any exposed skin thoroughly after handling          Do not eat, drink or smoke when using this product          Use only outdoors or in a well-ventilated area          Do not breathe dust/fume/gas/mist/vapors/spray</p>
<b>Safety Phrases:</b>	<p>IF exposed or concerned: Get medical advice/attention          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 advice/attention.          IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.          IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do not induce vomiting.</p>
<b>EU Regulations:</b>	EINECS: Listed
<b>US Regulations:</b>	<p>TSCA: Not listed          California Proposition 65: Ochratoxin A (CAS 303-47-9) - Carcinogen</p>
<b>U.S. Federal Regulations:</b>	<p>SARA 302/304 emergency planning and notification: No products were found.          SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard, Chronic Health Hazard          SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>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.</p> <p>OSHA:          Acute toxicity - Oral Category 2          Serious eye damage/eye irritation Category 2A          Carcinogenicity Category 1B          Reproductive toxicity Category 2          Specific target organ toxicity (single exposure) Category 3</p>



	Specific target organ toxicity (repeated exposure) Category 2 Aspiration toxicity Category 1
<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.*