

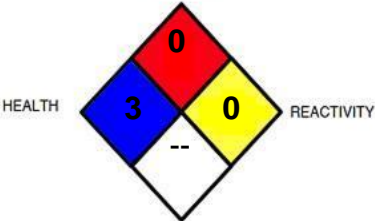
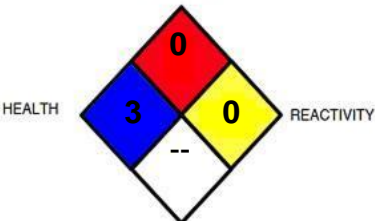


## Material Safety Data Sheet

Section 1: Product & Company Identification	
<b>Product Name:</b>	Okadaic Acid, Free form
<b>Product #:</b>	O-1024
<b>Synonyms:</b>	9,10-deepithio-9,10-didehydro-acanthifolicin, Halochondrine A
<b>Supplier:</b>	A.G. Scientific, Inc. 6450 Lusk Blvd E102 San Diego CA 92121 Tele# + 858-452-9925 Fax# + 858-452-9926
<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 #	%	HCS Classification
Okadaic Acid	78111-17-8	N/A	≥98 %	N/A

Section 3: Hazards Identification	
<b>Symbols</b>	  <p>GHS07 Hazard      GHS06 Toxic</p>
<b>HMIS Classification</b>	<p>FLAMMABILITY</p>  <p>HEALTH      REACTIVITY</p> <p>OTHER</p>
<b>NFPA Classification</b>	<p>FLAMMABILITY</p>  <p>HEALTH      REACTIVITY</p> <p>OTHER</p>





<b>Section 4: First Aid Measures</b>	
<b>General Overview:</b>	Avoid contact, wear suitable protective clothing, gloves and eye/face protection.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration, seek medical attention if symptoms occur.
<b>Skin:</b>	Wash immediately with water for 15 minutes. Remove contaminated clothing. Wash contaminated clothing before reuse. Seek medical attention if symptoms appear.
<b>Eyes:</b>	In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes. Remove contacts. Assure adequate flushing of the eyes by separating the eyelids with fingers.
<b>Ingestion:</b>	If swallowed, DO NOT induce vomiting. Wash mouth with water, never give anything to unconscious person. Seek medical attention.
	See section 11 for more detailed information on health effects & symptoms

<b>SECTION 5: Fire Fighting Measures</b>	
<b>Flammability of the product:</b>	N/A
<b>Extinguishing Media:</b>	Dry Chemical Powder for SMALL FIRES and carbon dioxide or water spray, fog or foam for LARGE FIRES. Do not use water jet.
<b>Hazardous thermal (de)composition products:</b>	N/A
<b>Special Fire Fighting Procedures:</b>	Wear self-contained breathing apparatus (SCBA) and protective clothing to prevent contact with skin and eyes. Be sure to use an approved/certified respirator or equivalent.
<b>Flash Point:</b>	N/A

<b>Section 6: Accidental Release Measures</b>	
<b>Personal Precautions:</b>	Use Personal Protection Equipment. Splash goggles. Gloves. Avoid dust formation.
<b>Environmental Precautions:</b>	Do not let product enter drains.
<b>Methods for Clean-up:</b>	Sweep up & shovel into suitable disposal container. Ventilate area and wash spill site after material pickup is complete.

<b>SECTION 7: Handling &amp; Storage</b>	
<b>Storage:</b>	Store at -20°C (long term). Keep container tightly closed and in cool, dry, well ventilated area.
<b>Handling:</b>	Avoid contact with skin and eyes.(material may be an irritant) Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

<b>SECTION 8: Exposure controls / Personal Protection</b>	
<b>Respiratory Protection:</b>	

	 <p>If exposure limit reached use ventilation system when handling or wear appropriate government (NIOSH/MSHA) approved respirator.</p>
<b>Skin and Body:</b>	  <p>Chemical-resistant gloves and lab coat/other protective clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.</p>
<b>Eyes:</b>	 <p>Safety goggles.</p>
<b>Ventilation/Engineering Measures:</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.
<b>Hygiene:</b>	Wash hands after handling compound and before eating, smoking, using lavatory and at the end of the day.
<b>Other:</b>	N/A

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Crystalline solid or clear, colorless film
<b>Formula</b>	$C_{44}H_{68}O_{13}$
<b>Molecular Wt.</b>	805.00 g/mol
<b>Melting Pt.</b>	N/A
<b>Boiling Pt.</b>	N/A
<b>Density:</b>	N/A
<b>Vapor Pressure:</b>	N/A
<b>Evaporation Rate:</b>	N/A
<b>Vapor Density:</b>	N/A
<b>Solubility:</b>	Soluble in DMSO, methanol, or ethanol
<b>Flash Point:</b>	N/A
<b>Autoignition Temp:</b>	N/A

SECTION 10: Stability and Reactivity	
<b>Stability:</b>	Stable under proper storage conditions. Avoid acids and bases.
<b>Hazardous decomposition products:</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides
<b>Materials to Avoid:</b>	Strong oxidizing agents. Protect from light and heat.
<b>Conditions to avoid:</b>	N/A

SECTION 11: Toxicological Information	
<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	Intraperitoneal toxicity (LD50): 192 µg/kg (mouse)
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	<p>Mutagenic: Effects have occurred in experimental animals</p> <p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</p> <p>ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>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.</p> <p>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.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

SECTION 12: Ecological Information	
<b>Ecotoxicity:</b>	N/A
<b>Mobility:</b>	N/A
<b>Persistence and degradability:</b>	N/A
<b>Bioaccumulative potential:</b>	N/A
<b>Other adverse effects:</b>	N/A
<b>Corrosivity Characteristic:</b>	N/A
<b>General Notes:</b>	Do not allow undiluted product or large quantities of it to reach groundwater, water course or sewer system. Do not allow materials to be released into the environment without proper government permits. Treat as potentially toxic if released into the environment.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	N/A
<b>Contaminated Packaging:</b>	Do not re-use empty containers. Dispose of as unused product. Cannot be disposed. Dispose of as unused product.

### SECTION 14: Transportation Information

<b>UN ID#:</b>	3462
<b>ADR / RID (LAND):</b>	N/A
<b>DOT regulations:</b>	Toxins, extracted from living sources, solid, n.o.s. (Okadaic acid), Class: 6.1, Packing group: I
<b>IMDG/IMO (SEA):</b>	Toxins, extracted from living sources, solid, n.o.s. (Okadaic acid), Class: 6.1, Packing group: I
<b>IATA/DGR (AIR):</b>	Toxins, extracted from living sources, solid, n.o.s. (Okadaic acid), Class: 6.1, Packing group: I
<b>Special Provisions:</b>	N/A

### SECTION 15: Regulatory Information

<b>Health Phrases:</b>	N/A
<b>Risk Phrases:</b>	N/A
<b>Safety Phrases:</b>	N/A
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA. No products were found. California Proposition 65: No products were found.
<b>U.S. Federal Regulations:</b>	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard 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: No products were found.
<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. A.G. Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. A.G. Scientific products are for research purposes only. Not for human use or consumption.*