



Safety Data Sheet (SDS) According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2015-04-27

Revision Date: 2024-10-23

Version: 4

SECTION 1. Identification

Product identifier

Product No 5934
Product name Okadaic Acid
UN number UN3462

Recommended use of the chemical and restrictions on use

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

Manufacturer, importer, supplier

Manufacturer address Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
United States
TEL: +1 978 867 2300
FAX: +1 978 867 2400
Website www.cellsignal.com
Email address support@cellsignal.com
Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

This substance/mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute inhalation toxicity	Category 3
Skin corrosion/irritation	Category 2

GHS Label elements, including precautionary statements



Signal Word

Danger

Hazard statement(s)

Toxic if swallowed.
Toxic in contact with skin.
Toxic if inhaled.
Causes skin irritation.

Precautionary Statement(s)

Avoid breathing dust/fume/gas/mist/vapors/spray.
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.
Wear protective gloves and protective clothing.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Remove/Take off immediately all contaminated clothing
Wash contaminated clothing before reuse
If skin irritation occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container to an approved waste disposal plant.

Supplementary Hazard Information

Hazards not otherwise classified (HNOC)

Not applicable.

SECTION 3. Composition/information on ingredients

Formula $C_{44}H_{68}O_{13}$
Molecular Weight 805.00 g/mol
Synonyms Okadaic acid;
Acanthifolicin, 9,10-deepithio-9,10-didehydro-
UNII-1W21G5Q4N2

Chemical name	CAS No	Weight-%
9,10-Deepithio-9,10-didehydroacanthifolicin	78111-17-8	100

SECTION 4. First-aid measures

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Skin contact Immediate medical attention is required. Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use.
Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediate medical attention is required. If not breathing, give artificial respiration.
Ingestion Immediate medical attention is required. Never give anything by mouth to an unconscious person. Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice. Consult a physician.

Most important symptoms and effects, both acute and delayed

Nausea. Vomiting. Abdominal pain. Diarrhea. Headache.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Advice for emergency responders

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.
Protection of first-aiders	Use personal protective equipment Avoid contact with skin, eyes and clothing

SECTION 5. Fire-fighting measures**Extinguishing media**

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
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Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel	Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Other information	No information available.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use personal protective equipment. 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 dust formation. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

SECTION 7. Handling and storage

Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions	Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.
Packaging material	No information available
Incompatible products	None known based on information supplied

SECTION 8. Exposure controls/personal protection

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eye/face protection	Tightly fitting safety goggles
Skin and body protection	Wear protective gloves/clothing.
Respiratory protection	In case of inadequate ventilation wear respiratory protection.
Hygiene measures	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Crystalline Powder
Color	White
Odor	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No information available		
Melting point/freezing point	164-175 °C		
Boiling point or initial boiling point and boiling range	No information available		
Flash point	No information available		
Evaporation rate	No information available		
Flammability	No information available		
Lower explosion limit	No information available		
Upper explosion limit	No information available		
Vapor pressure	No information available		
Relative vapor density	No information available		

Density and/or relative density	No information available
Solubility	No information available.
Solubility in other solvents	No information available.
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Viscosity, dynamic	No information available

Other information

Softening point	No information available
Molecular Weight	805.00
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions	None under normal processing.
Hazardous polymerization	None under normal processing.

Conditions to Avoid

No information available

Incompatible Materials

None known based on information supplied

Hazardous Decomposition Products

None known based on information supplied

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation	Toxic by inhalation.
Eye contact	There is no data available for this product.
Skin contact	Irritating to skin. Toxic in contact with skin.
Ingestion	Toxic if swallowed.

Information on toxicological effects

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

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

Symptoms	Nausea. Vomiting. Abdominal pain. Diarrhea. Headache.
Skin corrosion/irritation	Irritating to skin.
Sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	Avoid repeated exposure.
Neurological effects	No information available.
Aspiration Hazard	No information available.

SECTION 12. Ecological information**Ecotoxicity**

100% of the mixture consists of components of unknown hazards to the aquatic environment.

Persistence and degradability	No information available
Mobility	No information available
Bioaccumulation	No information available

Other adverse effects

No information available.

SECTION 13. Disposal considerations**Waste Disposal Methods**

Should not be released into the environment.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way. Dispose of wastes in an approved waste disposal facility.

SECTION 14. Transport information**DOT**

UN number	UN3462
UN proper shipping name	Toxins, extracted from living sources, solid, n.o.s. (Okadaic acid)
Transport hazard class(es)	6.1
Packing group	II


IATA

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SECTION 15. Regulatory information**North American Inventory Listing**

Chemical name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
9,10-Deepithio-9,10-didehydroa canthifolicin	Not Listed	Not Listed	Not Listed	Not Listed

Canadian Workplace Hazardous Materials Information System (WHMIS) Classification

	Class D1A - Very Toxic Materials at $\geq 1\%$ Class D2A - Very Toxic Material at $\geq 0.1\%$ Class D2B - Toxic Material at $\geq 1\%$
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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. FIFRA Label Information

This product does not contain any substances regulated as pesticides.

US Commerce Department - Export Administration Regulations Information

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

U.S. Drug Enforcement Administration Information

This product does not contain any substances regulated under the DEA.

SECTION 16. Other information

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet