
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Okadaic Acid
Product Number 5934
Identified Uses For Research Use Only (RUO). Not intended for use in humans or animals.
Not intended for therapeutic or diagnostic procedures.

Manufacturer/Supplier Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923 USA

Phone #: 978-867-2300

2. HAZARDS IDENTIFICATION

Emergency Overview

Danger



OSHA Hazards

Toxic by Inhalation, Toxic by Ingestion, Toxic by skin absorption, Irritant

GHS Classification

Acute Toxicity, Oral (Category 3)
Acute Toxicity, Inhalation (Category 3)
Acute Toxicity, Dermal
Skin Irritation (Category 2)

Physical State

Solid

Potential Health Effects

Acute Toxicity

Eyes	May causes eye irritation.
Skin	Toxic if absorbed through skin. May cause skin irritation.
Inhalation	Toxic if inhaled. May cause respiratory tract irritation.
Ingestion	Toxic if swallowed.

Target organ effects

Tumor promoter, Gastrointestinal disturbance

Chronic Effects

Carcinogenic effects	Equivocal carcinogenic agent by RTECS criteria. Skin and appendages: Other: tumors
Mutagenic effects	No data available.
Reproductive toxicity	No data available.
Sensitization	No data available.

 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients

Chemical Name	CAS No.	Concentration
Okadaic Acid; OA	78111-17-8	>98%

 4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	Rinse immediately with soap and plenty of water. Get medical attention immediately.
Inhalation	Move to fresh air. Get medical attention.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Notes to physician	Treat symptomatically.

 5. FIRE FIGHTING MEASURES

Flash Point	Not flammable. See Section 9. Physical and Chemical Properties
Suitable Extinguishing Media	Use dry chemical , water spray, alcohol resistant foam or carbon dioxide.
Special exposure hazards	Hazardous decomposition products formed under fire conditions –toxic gases can be evolved.
Special protection for fire fighters	Wear self-contained breathing apparatus and protective unit
Other information	No data available

 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes, clothing. Avoid creating dusts during clean up.
Environmental precautions	Prevent product from entering drains. Prevent further spillage if safe to do so.

 7. HANDLING AND STORAGE

Safe handling advice	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.
Storage conditions	Keep container tightly closed in cool dry place.
Incompatibilities	No data available
Specific end uses	No data available

 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

This product contains no substances with established exposure limit values.

Engineering Measures

Emergency eyewash and safety shower. Mechanical exhaust required.

Hygiene Measures

Do not eat, drink or smoke when handling product. Wear suitable gloves and eye/face protection. Wash hands thoroughly after handling product. Regular cleaning of equipment, work area and clothing is recommended. Wash contaminated clothing before reuse.

Personal Protective Equipment**Respiratory Protection**

In case of insufficient ventilation wear suitable respiratory protective equipment tested and approved under appropriate government standards such as NIOSH, CEN)

Eye Protection:

Safety glasses tested and approved under appropriate government standards such as NIOSH

Skin and body protection:

Wear suitable protective clothing, protective shoes or boots.

Hand protection:

Wear compatible chemical resistant gloves. Dispose of gloves in accordance with applicable laws and good laboratory practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	solid powder
Appearance	no data available
Odor	no data available
pH	no data available
Melting point/freezing point	no data available
Boiling point	no data available
Evaporation rate	no data available
Flash point	no data available
Autoignition temperature	no data available
Flammability limits in air	no data available
Explosive properties	no data available
VOC content	no data available
Decomposition temperature	no data available
Solubility	Soluble in DMSO or ethanol

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Conditions/Materials to avoid

Acids and bases / protect from light and heat.

Hazardous decomposition products

Thermal decomposition may produce toxic gases such as carbon monoxide and carbon dioxide

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

Acute Oral Toxicity : LD50 Oral, rat 0.15 mg/kg

Routes of Exposure
Potential Health Effects
Acute Toxicity

Eyes	May cause eye irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation
Ingestion	May be harmful if swallowed.

Target organ effects No information available

Chronic Effects

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Teratogenic effects	No information available
Sensitization	No information available

Additional Information: RTECS AA8227800

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility	No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with all applicable environmental laws and regulations.

14. TRANSPORT INFORMATION
IATA/DOT/IMDG

Proper Shipping Name	Toxins, extracted from living sources, solid, n.o.s. (Okadaic Acid)
Hazard Class	6.1 Toxic Substance
Subsidiary Class	No information available
Packing Group	I
UN-No	3462
Marine Pollutant:	No
Poison Inhalation Hazard:	No

15. REGULATORY INFORMATION
OSHA Hazards

Toxic by Ingestion

GHS Classification

Acute Toxicity, Oral (Category 3)



Pictogram:

Signal Word: Warning

Hazard Statements

H301 Toxic if swallowed or in contact with skin

H315 Causes skin irritation

H331 Toxic if inhaled

Precautionary Statements

P261 Avoid breathing dust

P280 Wear protective gloves/protective clothing

P301+P310 IF SWALLOWED: immediately call Poison Control or doctor/physician.

P311 Call Poison center or a doctor/physician.

U.S. Federal Regulations

SARA 302

No chemicals in this material are subject to reporting requirements established by SARA Title III, Section 302

SARA 311/312

Acute Health Hazard

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals that exceed the reporting levels of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulations

Massachusetts Right-to-Know Components:

None

New Jersey Right-to-Know Components:

Okadaic Acid CAS# 78111-17-8

Pennsylvania Right-to-Know Components:

Okadaic Acid CAS# 78111-17-8

California Proposition 65

This product does not contain chemicals known to the State of California to cause birth defects or other reproductive harm.

WHMIS Hazard Class

D1A	Very toxic material causing immediate and serious toxic effects	Highly Toxic
D2B	Toxic material causing other toxic effects	Moderate skin irritant

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

Revision date 2012-08-10
Revision Note ***Indicates updated section

Disclaimer

The information provided on this material safety data sheet is to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Material Safety Data Sheet