

# Safety Data Sheet

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Version 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** Resiniferatoxin

**UN/ID No** 2923

**Recommended use** For research use only

**Supplier Address** Abcam Inc  
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Cambridge, MA 02139-1517  
USA  
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)  
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**Emergency telephone** Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

## 2. HAZARDS IDENTIFICATION

### GHS - Classification

Acute oral toxicity	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### GHS Label elements, including precautionary statements



**Signal Word**  
Danger

### Hazard statements

H301 - Toxic if swallowed  
H314 - Causes severe skin burns and eye damage

**Precautionary Statements - EU (§28, 1272/2008)**

P280 - Wear protective gloves/ eye protection/ face protection

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician

P330 - Rinse mouth

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

P270 - Do not eat, drink or smoke when using this product

P501 - Dispose of contents/ container to an approved waste disposal plant

P405 - Store locked up

**Other information**

Caution - substance not yet tested completely

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Resiniferatoxin	57444-62-9	100	Acute Tox. 3 (H301) Skin Corr. 1B (H314)

For the full text of the H-Statements mentioned in this Section, see Section 16

**4. FIRST AID MEASURES**

<b>General advice</b>	Immediate medical attention is required.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Immediate medical attention is required.
<b>Notes to physician</b>	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.
<b>Protection of first-aiders</b>	Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**5. FIRE-FIGHTING MEASURES**

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<b>Flammable properties</b>	Not flammable.
<b>Flash point</b>	not determined
<b>Suitable extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.
<b>Specific hazards arising from the chemical</b>	The product causes burns of eyes, skin and mucous membranes Thermal decomposition can lead to release of irritating gases and vapors In the event of fire and/or explosion do not breathe fumes
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Use personal protective equipment. Avoid contact with the skin and the eyes. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces with water.
<b>Other information</b>	Refer to protective measures listed in sections 7 and 8.

## 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.
<b>Technical measures/Storage conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering measures</b>	Showers Eyewash stations Ventilation systems
<b>Personal protective equipment</b>	
<b>Eye/face protection</b>	Tightly fitting safety goggles. Face-shield.
<b>Skin and body protection</b>	No special protective equipment required.
<b>Respiratory protection</b>	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.
<b>Hygiene measures</b>	When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White.	<b>Odor</b>	No information available.
<b>Odor Threshold</b>	No information available	<b>Physical State @20°C</b>	Solid
<b>pH</b>	No information available	<b>Autoignition temperature</b>	No information available
<b>Flash point</b>	No information available	<b>Boiling point/boiling range</b>	No information available
<b>Decomposition temperature</b>	No information available	<b>Flammability Limits in Air</b>	No information available
<b>Melting point/range</b>	No information available		
<b>Explosion limits</b>	No information available		
<b>Specific Gravity</b>	No data available	<b>solubility</b>	Dimethylsulfoxide.
<b>Evaporation rate</b>	No information available	<b>Vapor Pressure @20°C (kPa)</b>	No information available
<b>Vapor density</b>	No data available	<b>VOC Content(%)</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Incompatible products</b>	Incompatible with strong acids and bases. Incompatible with oxidizing agents.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	Carbon monoxide (CO). Carbon dioxide .
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b>Product Information</b>	Product is toxic by ingestion Corrosive to skin, eyes and/or respiratory tract.
<b>Inhalation</b>	Causes burns
<b>Eye contact</b>	Causes burns
<b>Skin contact</b>	Causes burns
<b>Ingestion</b>	Toxic if swallowed Causes burns

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Resiniferatoxin	148.1 mg/kg (Rat)		

### Chronic toxicity

<b>Chronic toxicity</b>	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen Avoid repeated exposure Possible risks of irreversible effects
<b>Target Organ Effects</b>	None known.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

## 13. DISPOSAL CONSIDERATIONS

<b>Waste disposal methods</b>	Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local laws. The use of licensed waste hauler and disposal contractors is advised.
<b>Contaminated packaging</b>	Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

<b>DOT</b>	Excepted Quantity
<b>Proper shipping name</b>	Corrosive solid, toxic, n.o.s. (Resiniferatoxin)
<b>Hazard class</b>	8
<b>Subsidiary Class</b>	6.1
<b>UN/ID No</b>	2923
<b>Packing group</b>	II
<b>IATA</b>	Excepted Quantity
<b>UN/ID No</b>	2923
<b>Proper shipping name</b>	Corrosive solid, toxic, n.o.s. (Resiniferatoxin)

<b>Hazard class</b>	8
<b>Subsidiary hazard class</b>	6.1
<b>Packing group</b>	II

<b>ADR</b>	Excepted Quantity
<b>Proper shipping name</b>	Corrosive solid, toxic, n.o.s. (Resiniferatoxin)
<b>Hazard class</b>	8 (6.1)
<b>UN/ID No</b>	2923
<b>Packing group</b>	II

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

#### **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**

<b>Acute Health Hazard</b>	yes
<b>Chronic Health Hazard</b>	yes
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	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.

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

### International Regulations

#### **WHMIS Note:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**16. OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H301 - Toxic if swallowed H314 - Causes severe skin burns and eye damage

**Hazard statements**

H301 - Toxic if swallowed

H314 - Causes severe skin burns and eye damage

**Revision Date** 13-Feb-2018

**Revision Note** No information available.

**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 MSDS**