1. PRODUCT AND COMPANY IDENTIFICATION

Product name       Veratridine
UN/ID No           1544
Recommended use    For research use only

Supplier Address   Abcam Inc
                   1 Kendall Square, Ste 341
                   Cambridge, MA 02139-1517
                   USA
                   Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)
                   Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

E-mail address     technical@abcam.com

2. HAZARDS IDENTIFICATION

GHS - Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>2</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>2</td>
</tr>
<tr>
<td>Acute inhalation toxicity - dust/mist</td>
<td>2</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>2</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>2</td>
</tr>
<tr>
<td>Specific target organ systemic toxicity</td>
<td>3</td>
</tr>
<tr>
<td>(single exposure)</td>
<td></td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements

Signal Word
Danger
Hazard statements
H300 - Fatal if swallowed
H310 - Fatal in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H335 - May cause respiratory irritation
H361 - Suspected of damaging fertility or the unborn child

Precautionary Statements - EU (§28, 1272/2008)
P202 - Do not handle until all safety precautions have been read and understood
P201 - Obtain special instructions before use
P280 - Wear protective gloves/ eye protection/ face protection
P284 - Wear respiratory protection
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P262 - Do not get in eyes, on skin, or on clothing
P270 - Do not eat, drink or smoke when using this product
P264 - Wash face, hands and any exposed skin thoroughly after handling
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
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
P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P361 - Remove/Take off immediately all contaminated clothing
P362 - Take off contaminated clothing and wash before reuse
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veratridine</td>
<td>71-62-5</td>
<td>100</td>
<td>Acute Tox. 1 (H300)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 2 (H310)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 2 (H330)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2 (H319)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3 (H335)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2 (H315)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repr. 2 (H361f)</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16
4. FIRST AID MEASURES

General advice  Immediate medical attention is required.
Eye contact   Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
Skin contact  Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.
Inhalation    Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician or poison control center immediately.
Ingestion     Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Notes to physician  Treat symptomatically.
Protection of first-aiders  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

Flammable properties  Not flammable.
Flash point  Not determined
Suitable extinguishing media  Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Explosion Data
Sensitivity to Mechanical Impact  None.
Sensitivity to Static Discharge  None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions  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.
Environmental precautions  Try to prevent the material from entering drains or water courses.
Methods for containment  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.
Methods for cleaning up  Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Sweep up and shovel into suitable containers for disposal. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers.
Other information  Refer to protective measures listed in sections 7 and 8.

7. HANDLING AND STORAGE
Advice on safe handling
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.

Technical measures/Storage conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Engineering measures
Showers
Eyewash stations
Ventilation systems

Personal protective equipment
Eye/face protection
Tightly fitting safety goggles. Face-shield.

Skin and body protection
No special protective equipment required.

Respiratory protection
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.

Hygiene measures
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

Appearance
White.

Odor Threshold
No information available.

pH
No information available.

Flash point
No information available.

Decomposition temperature
No information available.

Melting point/range
No information available.

Explosion limits
No information available.

Specific Gravity
No data available.

Evaporation rate
No information available.

Vapor density
No data available.

Odor
No information available.

Physical State @20°C
Solid.

Autoignition temperature
No information available.

Boiling point/boiling range
No information available.

Flammability Limits in Air
No information available.

Solubility
ETHANOL, Dimethylsulfoxide.

Vapor Pressure @20°C (kPa)
No information available.

VOC Content(%)
Not applicable.

10. STABILITY AND REACTIVITY

Stability
Stable under recommended storage conditions.

Incompatible products
None known based on information supplied.

Conditions to avoid
None known based on information supplied.

Hazardous decomposition products

Hazardous polymerization
Hazardous polymerization does not occur.
# 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Inhalation</th>
<th>Eye contact</th>
<th>Skin contact</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very toxic by inhalation, in contact with skin and if swallowed Irritating to skin, eyes and / or respiratory tract.</td>
<td>Very toxic by inhalation May cause irritation of respiratory tract</td>
<td>May cause irritation</td>
<td>Very toxic in contact with skin May cause irritation</td>
<td>Very toxic if swallowed Ingestion may cause irritation to mucous membranes</td>
</tr>
</tbody>
</table>

## Chronic toxicity

**Chronic toxicity**
Possible risks of irreversible effects Prolonged or repeated exposure increases the risk Avoid repeated exposure

**Reproductive toxicity**
Product is or contains a chemical which is a known or suspected reproductive hazard

**Target Organ Effects**
None known.

# 12. ECOLOGICAL INFORMATION

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

# 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging**
Do not re-use empty containers.

# 14. TRANSPORT INFORMATION

**DOT**

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Excepted Quantity</th>
<th>Hazard class</th>
<th>UN/ID No</th>
<th>Packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkaloids, solid, n.o.s. (Veratridine)</td>
<td>1544</td>
<td>6.1</td>
<td></td>
<td>I</td>
</tr>
</tbody>
</table>

**IATA**

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1544</td>
<td>Alkaloids, solid, n.o.s. (Veratridine)</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Hazard</th>
<th>6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>no</td>
</tr>
</tbody>
</table>

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
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Revision Date 13-Jul-2015
Revision Note (M)SDS sections updated. 2. 7. 8.

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