1. PRODUCT AND COMPANY IDENTIFICATION

Product name: KB-R7943

UN/ID No: 3077

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

Emergency telephone: Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free) - Monday-Friday 8am-9pm EST

2. HAZARDS IDENTIFICATION

GHS - Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ systemic toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Acute aquatic toxicity</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements

Signal Word
Warning

Hazard statements
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H353 - May cause respiratory irritation
H400 - Very toxic to aquatic life
Precautionary Statements - EU (§28, 1272/2008)
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P280 - Wear protective gloves/ eye protection/ face protection
P264 - Wash face, hands and any exposed skin thoroughly after handling
P312 - Call a POISON CENTER or doctor/ physician if you feel unwell
P271 - Use only outdoors or in a well-ventilated area
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/ container to an approved waste disposal plant
P405 - Store locked up
P362 - Take off contaminated clothing and wash before reuse

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>KB-R7943</td>
<td>182004-65-5</td>
<td>60-100</td>
<td>Eye Irrit. 2 (H319) STOT SE 3 (H335)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2 (H315) Aquatic Acute 1 (H400)</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 If symptoms persist, call a physician.
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. If symptoms persist, call a physician.
Inhalation Move to fresh air. If symptoms persist, call a physician.
Ingestion Rinse mouth. If symptoms persist, call a physician.
Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable properties Not flammable.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Try to prevent the material from entering drains or watercourses.

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

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. Ensure adequate 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.

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
Shower
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.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Cream</td>
<td>Odor</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td>Physical State @20°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td>Solid</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td>Autoignition temperature</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No information available</td>
<td>Boiling point/boiling range</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx). Sulfur oxides.</td>
<td>No information available</td>
</tr>
<tr>
<td>Hazardous polymerization</td>
<td>Hazardous polymerization does not occur.</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>no data available</td>
<td>solubility</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td>Vapor density</td>
</tr>
<tr>
<td>VOC Content(%)</td>
<td>not applicable</td>
<td>no data available</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable under recommended storage conditions.</td>
<td></td>
</tr>
<tr>
<td>Incompatible products</td>
<td>None known based on information supplied.</td>
<td></td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>None known based on information supplied.</td>
<td></td>
</tr>
<tr>
<td>Ecotoxicity</td>
<td>Irritating to skin, eyes and / or respiratory tract.</td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause irritation of respiratory tract</td>
<td></td>
</tr>
<tr>
<td>Eye contact</td>
<td>May cause irritation</td>
<td></td>
</tr>
<tr>
<td>Skin contact</td>
<td>May cause irritation</td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td>Ingestion may cause irritation to mucous membranes</td>
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<tr>
<td>Chronic toxicity</td>
<td>Avoid repeated exposure</td>
<td></td>
</tr>
<tr>
<td>Target Organ Effects</td>
<td>None known.</td>
<td></td>
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</table>

10. STABILITY AND REACTIVITY

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information: Irritating to skin, eyes and / or respiratory tract.
Inhalation: May cause irritation of respiratory tract
Eye contact: May cause irritation
Skin contact: May cause irritation
Ingestion: Ingestion may cause irritation to mucous membranes

Chronic toxicity

Chronic toxicity: Avoid repeated exposure

Target Organ Effects: None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic organisms.
13. DISPOSAL CONSIDERATIONS

Waste disposal methods Dispose of in accordance with local regulations.
Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Environmentally hazardous substance, solid, n.o.s. [2-[(4-Nitrophenyl)methoxy]phenyl]ethyl ester carbamimidothioic acid methanesulfonate]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class</td>
<td>9</td>
</tr>
<tr>
<td>UN/ID No</td>
<td>3077</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
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IATA

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ADR

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<tbody>
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<td>Environmentally hazardous substance, solid, n.o.s. [2-[(4-Nitrophenyl)methoxy]phenyl]ethyl ester carbamimidothioic acid methanesulfonate]</td>
</tr>
<tr>
<td>Hazard class</td>
<td>9</td>
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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 Category</th>
<th>Acute Health Hazard</th>
<th>Chronic Health Hazard</th>
<th>Fire Hazard</th>
<th>Sudden Release of Pressure Hazard</th>
<th>Reactive Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</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
H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H400 - Very toxic to aquatic life

Hazard statements
H315 - Causes skin irritation
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H400 - Very toxic to aquatic life

Revision Date 13-Jul-2015
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