Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Cat#: 01542
Part Name: NONENYL SUCCINIC ANHYDRIDE (NSA)
Supplier: Polysciences, Inc.
400 Valley Road
Warrington, PA 18976 USA
MSDS Telephone #215-343-6484 Emergency only #215-378-4526

Identified uses: Laboratory use, manufacture of substances

Section 2: Hazards Identification

Hazard Overview
Causes eye irritation.
GHS Classification

Eye Irritation Category 2A

Signal word: Warning

Hazard and Precautionary Statements

H319 Causes serious eye irritation.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305B IF IN EYES, Separate eyelids with finger tips.
P314 Get medical advice/attention if you feel unwell.
P351 Rinse cautiously with water for several minutes.
P501 Dispose of contents/container to proper waste area in accordance with institutional practices and local, state or federal regulations.

NFPA Rating

Hazard Ratings:
These ratings are Polysciences’ Inc. own assessments of the properties of the material using the ANSI/NFPA 704 Standard. Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49).

If no data is listed the information is not available.

Health Flammability Reactivity
2 1 0

Section 3: Composition/ Information on Ingredients

Item# Name EINECS CAS# % in product
1 Nonenylsuccinic anhydride 249-317-8 0028928974 95-100

Section 4: First Aid Measures

Contact medical personnel if discomfort persists.
Flush eyes with flowing water for at least 15 minutes.
Separate eyelids with finger tips.
Wash skin with deluge of water for at least 15 minutes.

Section 5: Fire Fighting Measures

Flash point, deg F.: 300 Method: no data
UEL: no data LEL: no data Autoignition temperature, deg. F.: no data
Flammability Classification: not available Flame Propagation Rate: no data
Hazardous Combustion Products: none

Section 6: Accidental Release Measures

Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel.

No special measures are indicated.
Section 7: Handling and Storage

Store at room temp

Section 8: Exposure Controls/ Personal Protection

OSHA (ACGIH) Exposure Limits

<table>
<thead>
<tr>
<th>CAS#</th>
<th>IDLH:</th>
<th>TWA</th>
<th>STEL</th>
<th>CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ppm</td>
<td>ppm</td>
<td>mg/m3</td>
</tr>
<tr>
<td>OSHA</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>ACGIH</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
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The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves.

Use chemical splash goggles and face shield.

Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product.

Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

Section 9: Physical and Chemical Properties

Formula: C13H20O3  
Formula Weight: 224.3  
Vapor Pressure: <1 mm Hg  
Vapor Density: no data  
Boiling Point: 617  
Specific Gravity: 1.03  
Melting Point: no data  
Ph: no data  
Solubility: insoluble  
Appearance: yellow liquid slight

Section 10: Stability and Reactivity

Chemical Stability: stable  
Conditions to Avoid: none  
Incompatibility with other materials: oxidizers  
Hazardous Decomposition Products: none  
Hazardous Polymerization: will not occur

Section 11: Toxicological Information

Acute Data: no data  
Subchronic data: no data

Section 12: Ecological Information

no data

Section 13: Disposal Considerations

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Waste Code</th>
<th>Regulated Name</th>
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<tbody>
<tr>
<td>0028928974</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

Section 14: Transportation Data

Proper Shipping Name: NOT REGULATED

Chemical Name:

UN:

Class:

PG:

Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

All components of this product are on the TSCA public inventory.
Section 16: Other Information

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END OF MSDS