Section 1. Product and Company Identification
Supplier
CovaChem, LLC.
6260 East Riverside Blvd, STE 119
Loves Park, IL 61111
Phone: +1.815.315.1271 x3
Fax: +1.815.315.1272
Emergency Phone #:
+1.815.714.8421
Product Number
13504-25, 13504-custom
Product Name
N-Hydroxysuccinimide (NHS)

Section 2. Composition / Information on Ingredients
OSHA Hazards
No OSHA Hazards known.
Not a dangerous substance according to GHS.

HMIS Classification
Health Hazard 0
Flammability 0
Physical Hazard 0

NFPA Rating
Health Hazard 0
Flammability 0
Physical Hazard 0

Potential Health Effects
Inhalation May be harmful if inhaled. May cause respiratory irritation.
Skin May be harmful if absorbed through the skin.
Eyes May cause irritation to the eyes.
Ingestion May be harmful if ingested.

Section 3. Hazards Identification
Synonyms
NHS; hydroxysuccinimide; 1-Hydroxy-2,5-pyrrolidinedione; HOSu,
Molecular Weight
115.09
Formula
C4H5NO3
According to OSHA criteria, no ingredients are hazardous.
CAS Number
6066-82-6

Section 4. First Aid Measures
If Inhaled
Move to fresh air. Give artificial respiration if breathing has ceased.
In case of Skin Contact
Wash with soap and water.
In Case of Eye Contact
Flush with plenty of water. Seek medical attention.
If Swallowed
Rinse mouth with water and seek medical attention.

Section 5. Fire-Fighting Measures
Suitable Extinguishing Media
Water, dry chemical, alcohol resistant foam are all suitable.
Protective Equipment
If needed, wear self contained breathing apparatus.
Hazardous Combustion Products
Carbon oxides and Nitrogen oxides may form upon combustion.

Section 6. Accidental Release Measures
Personal Precautions
Avoid breathing dust or vapors.
Environmental precautions
Prevent environmental release.

Section 7. Handling and Storage
Conditions for Safe Storage
Store container in a well ventilated, dry location.
Precautions regarding safe handling
Provide adequate ventilation and standard fire prevention measures.

Section 8. Exposure Controls / Personal Protection
Does not contain any substance with occupational exposure limit values.
Respiratory Protection
Use of a dust respirator is recommended (ie. type N95)
Hand Protection
Handle with nitrile rubber gloves.

Section 9. Physical and Chemical Properties
Form
white solid
Melting Point
95-98 C
Boiling Point
unavailable
Flash Point
unavailable
Ignition Temperature
unavailable
Autoignition Temperature
unavailable
Density
unavailable
Water Solubility
unavailable
Partition Coeff: n-octanol/water
unavailable

Section 10. Stability and Reactivity
Chemical Stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
unavailable
Conditions to Avoid
Do not expose to moisture
Materials to Avoid
Strong Oxidizers, Acid anhydrides, Acid chlorides, Strong bases
Hazardous decomposition products
Nitrous oxides and carbon oxides.

Section 11. Toxicology
### MSDS - Material Safety Data Sheet

<table>
<thead>
<tr>
<th>Topic</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>data unavailable</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>data unavailable</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>data unavailable</td>
</tr>
<tr>
<td>Skin corrosion / irritation</td>
<td>data unavailable</td>
</tr>
<tr>
<td>Eye Damage or Irritation</td>
<td>data unavailable</td>
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<tr>
<td>Skin and Respiratory Sensitization</td>
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<tr>
<td>Germ Cell Mutagenicity</td>
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<tr>
<td>Carcinogenicity</td>
<td>No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.</td>
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<tr>
<td>IARC</td>
<td>No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by ACGIH.</td>
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<tr>
<td>ACGIH</td>
<td>No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by NTP.</td>
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<tr>
<td>NTP</td>
<td>No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by OSHA.</td>
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<td>Reproductive Toxicity</td>
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<tr>
<td>Teratogenicity</td>
<td>data unavailable</td>
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<tr>
<td>Aspiration Hazard</td>
<td>data unavailable</td>
</tr>
<tr>
<td>Potential Health Effects</td>
<td>Inhalation: May be harmful if inhaled.</td>
</tr>
<tr>
<td></td>
<td>Ingestion: May cause harm if swallowed.</td>
</tr>
<tr>
<td></td>
<td>Skin: May cause harm if absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>Eyes: May cause eye irritation.</td>
</tr>
<tr>
<td>Section 12.</td>
<td>Ecological Information</td>
</tr>
<tr>
<td>Toxicology</td>
<td>data unavailable</td>
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<tr>
<td>Persistence and degradability</td>
<td>data unavailable</td>
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<tr>
<td>Bioaccumulative potential</td>
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<tr>
<td>Mobility in soil</td>
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<tr>
<td>PBT and vPvB assessment</td>
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</tr>
<tr>
<td>Other Adverse effects</td>
<td>data unavailable</td>
</tr>
<tr>
<td>Section 13.</td>
<td>Disposal Consideration</td>
</tr>
<tr>
<td>Disposal Considerations</td>
<td>be recycled when possible. Please dispose any unused or used materials in accordance with applicable national, regional and local laws and regulations.</td>
</tr>
<tr>
<td>Section 14.</td>
<td>Transportation Information</td>
</tr>
<tr>
<td>DOT (USA)</td>
<td>Not classified as dangerous goods</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not classified as dangerous goods</td>
</tr>
<tr>
<td>IATA</td>
<td>Not classified as dangerous goods</td>
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<td>Section 15.</td>
<td>Regulatory Information</td>
</tr>
<tr>
<td>OSHA Hazards</td>
<td>None known</td>
</tr>
<tr>
<td>SARA 302 Components</td>
<td>No chemicals in this material are subject to reporting requirements of SARA Title III, Section 302.</td>
</tr>
<tr>
<td>SARA 311/312</td>
<td>No SARA Hazards</td>
</tr>
<tr>
<td>Californial Prop. 65 Components</td>
<td>This material does not contain any chemicals known to the State of California to cause reproductive harm or birth defects.</td>
</tr>
<tr>
<td>Right to Know Components</td>
<td>N-Hydroxysuccinimide (CAS# 6066-82-6)</td>
</tr>
<tr>
<td>Section 16.</td>
<td>Other Information</td>
</tr>
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<td>Other Information</td>
<td>The information represented in this MSDS is believed to be correct and is based on the current state of our knowledge. This document or any other document does not represent or suggest any type of warantee or guarantee of the product properties or characteristics of this material. CovaChem, LLC and its affiliates shall not be held liable for any damages that result from contact</td>
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