

## Material Safety Data Sheet. No: SD2166-R00

### Section 1 : Chemical Identification

<b>Catalogue No.:</b>	2166-XXXX	<b>Name:</b>	Thioctic acid NHS-Ester
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### Section 2 : Composition/information on Ingredients

Chemical Name	CAS No.	EINECS No.
1-((5-(1,2-dithiolan-3-yl)pentanoyl)oxy)-2,5-pyrrolidinedione	N/A	N/A

### Section 3 : Hazards Identification

<b>Main Hazard</b>	Harmful if swallowed
<b>Other Specific Hazards</b>	N/A

### Section 4 : First Aid Measures

<b>Eyes</b>	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. OBTAIN MEDICAL ATTENTION
<b>Skin</b>	In case of contact, remove contaminated clothing, immediately wash skin with soap and copious amounts of water. OBTAIN MEDICAL ATTENTION
<b>Ingestion</b>	Induce vomiting and wash out mouth with water provided the person is conscious. OBTAIN MEDICAL ATTENTION
<b>Inhalation</b>	Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.

### Section 5 : Fire Fighting Measures

<b>Extinguishing Media</b>	Carbon Dioxide; Foam; Water
<b>Special Hazards of Product</b>	Emits toxic fumes under fire conditions
<b>Protective Equipment for Fire Fighting</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

### Section 6 : Accidental Release Measures

<b>Personal Protection</b>	Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves
<b>Leaks and Spills</b>	Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 : Handling and Storage

<b>Handling</b>	Do not breathe dust. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.
<b>Storage</b>	Keep tightly closed.

### Section 8 : Exposure controls/Personal Protection

<b>Exposure Controls</b>	Safety shower and eye bath.
<b>Personal Protection</b>	Use dust mask, chemical resistant gloves, safety goggles

### Section 9 : Physical and Chemical Properties

<b>Physical State</b>	Slightly yellow powder		
<b>Melting Point</b>	90-92°C	<b>Boiling Point</b>	N/A
<b>Flash Point</b>	N/A	<b>Explosion Limits</b>	N/A

<b>Solubility (Water)</b>	Insoluble	<b>Solubility (Org. Solvents)</b>	Soluble EtOH
<b>Chemical Formula</b>	C <sub>12</sub> H <sub>17</sub> NO <sub>4</sub> S <sub>2</sub>	<b>Molecular Weight</b>	303.40
<b>Other Information</b>			

## Section 10 : Stability and Reactivity

<b>Chemical Stability</b>	Stable
<b>Incompatibilities</b>	N/A
<b>Hazardous Decomposition or Combustion Products</b>	Carbon Monoxide, Carbon Dioxide, Sulphur dioxide
<b>Hazardous Polymerisation</b>	Will not occur

## Section 11 : Toxicological Data

<b>Toxic Effects</b>	N/A
<b>Other Toxicological Data</b>	<p>Signs and symptoms of exposure - to the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly tested.</p> <p>Route of exposure</p> <p>Skin contact: may cause skin irritation.</p> <p>Skin absorption: may be harmful if absorbed through the skin.</p> <p>Eye contact: may cause eye irritation</p> <p>Inhalation: may be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.</p> <p>Ingestion: harmful if swallowed.</p>

## Section 12 : Ecological Information

Data not yet available. In use, caution should be exercised to minimise release into the environment by using appropriate containment procedures

## Section 13 : Disposal Information

Dispose by incineration at high temperature in an approved incinerator fitted with appropriate environmental protection equipment. Dispose of in accordance with all applicable Local, National, State and Federal regulations. Labels should not be removed from containers until they have been thoroughly cleaned in an appropriate manner. Containers should not be treated as domestic waste and disposed of appropriately. Always use an approved disposal company.

## Section 14 : Transport Information

<b>UN No.</b>	N/A	<b>UN Class</b>	N/A	<b>UN Packing Gp.</b>	N/A
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<b>Road Freight</b>	Non-hazardous for road freight
<b>Sea Freight</b>	Non-hazardous for sea freight
<b>Air Freight</b>	Non-hazardous for air freight

## Section 15 : Regulatory Information

### European Information:

<b>R Phrases</b>	R20/22 Harmful. Harmful by inhalation and if swallowed
<b>S Phrases</b>	S36 - Wear suitable protective clothing

## Section 16 : Other information

<b>MSDS First Issued</b>	Jan 2008	<b>MSDS Last Revision</b>	New	<b>MSDS Version</b>	R00
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