## Section 1 - Product and Company Information

<table>
<thead>
<tr>
<th>Product Name</th>
<th>8-Nicotinamide adenine dinucleotide, reduced dipotassium salt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Number</td>
<td>704506</td>
</tr>
<tr>
<td>Brand</td>
<td>Sigma Chemical</td>
</tr>
<tr>
<td>Company</td>
<td>Sigma-Aldrich</td>
</tr>
<tr>
<td>Address</td>
<td>3050 Spruce Street</td>
</tr>
<tr>
<td>City, State, Zip</td>
<td>SAINT LOUIS, MO 63103 US</td>
</tr>
<tr>
<td>Technical Phone</td>
<td>314 771 5785</td>
</tr>
<tr>
<td>Fax</td>
<td>800 325 5532</td>
</tr>
<tr>
<td>Emergency Phone</td>
<td>414 273 3850 Ext. 5966</td>
</tr>
</tbody>
</table>

## Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
<th>EC no</th>
<th>Annex I Index Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-NAD REDUCED FORM DIPOTASSIUM</td>
<td>14430-32-7</td>
<td>Yes</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>Percent</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ALCOHOL, NON-DENATURED, 200 PROOF METHANOL</td>
<td>64-17-6</td>
<td>&lt;= 1.000 %</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2H27K2N7O14P2</td>
<td></td>
</tr>
</tbody>
</table>

## Section 3 - Hazards Identification

### Emergency Overview
Irritating to eyes, respiratory system and skin.
Target organ(s): Eyes. Nerves.

### HNIS Rating
- Health: 2
- Flammability: 0
- Reactivity: 0

### NFPA Rating
- Health: 2
- Flammability: 0
- Reactivity: 0

Additional chronic hazards present.
For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

### Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

### Inhalation Exposure
If inhaled, remove to fresh air. If not breathing give artificial respiration. Breathing is difficult, give oxygen.

### Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

### Eye Exposure
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

## Section 5 - Fire Fighting Measures

### Autoignition Temp
N/A

### Extinguishing Media
- Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### Firefighting
- Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Specific Hazard(s): Evaporation toxic fumes under fire conditions.

## Section 6 - Accidental Release Measures

### Procedure(s) of Personal Protection(s)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

### Methods for Cleaning Up
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

### Handling
- User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

### Storage
- Suitable: Keep tightly closed. Store at 2-8°C.

## Section 8 - Exposure Controls / PPE

### Engineering Controls
- Safety shower and eye bath. Mechanical exhaust required.

### Personal Protective Equipment
- Respiratory: Government approved respirator.
- Hand: Compatible chemical-resistant gloves.
- Eye: Chemical safety goggles.
General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance
Physical State
Solid

Molecular Weight: 741.6 AMU

pH
N/A
BP/BP Range
N/A
MP/MP Range
N/A
Freezing Point
N/A
Vapor Pressure
N/A
Vapor Density
N/A
Saturated Vapor Conc.
N/A
SG/Density
N/A
Bulk Density
N/A
Odor Threshold
N/A
Volatile%
N/A
VOC Content
N/A
Water Content
N/A
Solvent Content
N/A
Evaporation Rate
N/A
Viscosity
N/A
Partition Coefficient
N/A
Decomposition Temp.
N/A
Flash Point °F
N/A
Flash Point °C
N/A
Explosion Limits
N/A
Flammability
N/A
Autoignition Temp
N/A
Solubility
N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.

Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Hazardous Decomposition Products
Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine, Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Section 11 - Toxicological Information

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Route of Exposure
Skin Contact
Causes skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
Causes eye irritation.
Inhalation
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion
May be harmful if swallowed.

Target Organ(s) or System(s)
Nerves, Liver, Eyes, Kidneys, Heart.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: N/A

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: Xi
Indication of Danger
Irritant.
Risk Statements
R: 36/37/38
Irritating to eyes, respiratory system and skin.
Safety Statements
S: 26 36
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Classification and Label Text
Indication of Danger
Irritant.
Risk Statements
Irritating to eyes, respiratory system and skin.

Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Statements
Target器官: Eyes, Nerves.

United States Regulatory Information
SARA Listed: Yes
Notes: This product is or contains a component that is subject to SARA313 reporting requirements.

Canada Regulatory Information
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: No
NDSL: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantees or the properties of the product. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.