Section 1 - Product and Company Information

Product Name: N,N'-DI(DNP)-L-HISTIDINE
Product Number: D9629
Brand: SIGMA
Company: Sigma-Aldrich
Address: 3050 Spruce Street
SAINT LOUIS MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name: L-HISTIDINE, N,
SARA 313
1-BIS(2,4-DINITROPHENYL)-
CAS #: 3129-33-7

Formula: C18H13N7O10
Synonyms: N,N'-Di(2,4-DNP)-L-histidine *
N,N'-Di(DNP)-L-histidine *
N,N'-Di(2,4-dinitrophenyl)-L-histidine

Section 3 - Hazards Identification

HMIS RATING
HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING
HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Section 5 - Fire Fighting Measures

FLASH POINT
N/A

AUTOIGNITION TEMP
N/A

FLAMMABILITY
Section 6 - Accidental Release Measures

Section 7 - Handling and Storage

STORAGE
Store at -20°C

Section 8 - Exposure Controls / PPE

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Molecular Weight</td>
<td>487,3000 AMU</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>BP/BP Range</td>
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</tr>
<tr>
<td>MP/MP Range</td>
<td>N/A</td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<td>Saturated Vapor Conc.</td>
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<tr>
<td>Bulk Density</td>
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<td>Odor Threshold</td>
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<tr>
<td>Volatile%</td>
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<td>VOC Content</td>
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<td>Water Content</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Viscosity</td>
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<td>Surface Tension</td>
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<td>Decomposition Temp.</td>
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<td>Flash Point</td>
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<td>Explosion Limits</td>
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<td>Refractive Index</td>
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<td>Optical Rotation</td>
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<td>Miscellaneous Data</td>
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<tr>
<td>Solubility</td>
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</tbody>
</table>

N/A = not available

Section 10 - Stability and Reactivity

Section 11 - Toxicological Information

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

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

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No

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 guarantee of 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 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.