

## MATERIAL SAFETY DATA SHEET

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Version 1.4

## Section 1 - Product and Company Information

Product Name DNP-L-GLUTAMIC ACID  
BIS(CYCLOHEXYLAMMONIUM) SALT  
Product Number D9254  
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	CAS #	SARA 313
L-GLUTAMIC ACID, N-(2,4-DINITROPHENYL)-, COMPD. WITH CYCLOHEXANAMINE (1:2)	102783-75-5	No

Formula C11H11N3O8·2C6H13N  
Synonyms N-2,4-DNP-L-glutamic acid bis(cyclohexylammonium)  
salt \* DNP-L-glutamic acid  
bis(cyclohexylammonium) salt \*  
N-(2,4-Dinitrophenyl)-L-glutamic acid  
bis(cyclohexylammonium) salt

## 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  
N/A

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Section 6 - Accidental Release Measures

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Section 7 - Handling and Storage

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STORAGE  
Store at -20°C

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Section 8 - Exposure Controls / PPE

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Section 9 - Physical/Chemical Properties

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Molecular Weight	511.6 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
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A = not available

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Section 10 - Stability and Reactivity

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Section 11 - Toxicological Information

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Section 12 - Ecological Information

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No data available.

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Section 13 - Disposal Considerations

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Section 14 - Transport Information

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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.

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Section 15 - Regulatory Information

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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

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Section 16 - Other Information

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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 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.