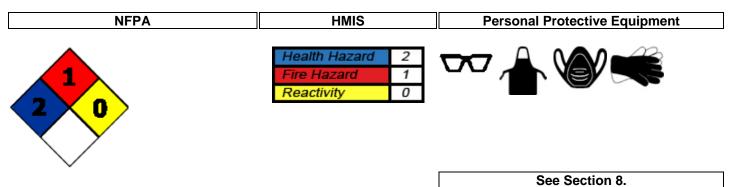




MATERIAL SAFETY DATA SHEET



1. CHEMICAL PRODUCT AI	ND COMPANY IDENTIFICATION
Product code:	N2108
Product Name:	5-NITROISOPHTHALIC ACID
Chemical Name:	No information available
Synonyms:	1,3-Benzenedicarboxylic acid, 5-nitro-
	1-Nitrobenzene-3,5-dicarboxyic acid
	5-Nitro-1,3-benzenedicarboxylic acid
	5-NItro-m-phthalic acid
Recommended use:	No information available.
CAS #:	618-88-2
Formula:	C8-H5-N-O6
RTECS #	Not available
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc.
	14422 South San Pedro St.
	Gardena, CA 90248
	(310) 516-8000
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Regina Wachenheim (East Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW WARNING! IRRITANT. Irritating to eyes. May cause skin irritation. May cause irritation of respiratory tract.				
Odor: No information available	Physical state: Solid.	Appearance: Powder.	Color: White. Yellow.	
OSHA Regulatory Status	This material is not cons	idered hazardous by the OSH	A Hazard Communication	

Standard (29 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

May cause skin irritation.

Eye Contact: Causes eye irritation.

Inhalation: May cause irritation of respiratory tract.

Ingestion:

No information available. May cause digestive tract irritation.

Chronic Potential Health Effects:

Component	Carcinogen Status:
5-Nitroisophthalic Acid 618-88-2 (100)	No information available

Target Organs:	No information available
Teratogenic Effects:	No information available
Mutagenic Effects:	No information available
Aggravated Medical Conditions:	No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
5-Nitroisophthalic Acid	618-88-2	100

4. FIRST AID MEASURES

General Advice:	Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)	
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminat clothes and shoes. Get medical attention if irritation develops. Consult a phy necessary.	
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention.	
Product code: N2108	Product name: 5-NITROISOPHTHALIC	2/10

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Notes to Physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties Not applicable Flashpoint (°C/°F): Flash Point Tested according to: Not available Lower Explosion Limit (%): No information available Upper Explosion Limit (%): No information available Autoignition Temperature (°C/°F): No information available Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or foam. **Unsuitable Extinguishing Media:** No information available. **Hazardous Combustion Products:** Carbon monoxide; Carbon dioxide; Nitrogen oxides May be combustible at high temperatures. Avoid generating Specific hazards: dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. During processing, dust may form explosive mixture in air.. As in any fire, wear self-contained breathing apparatus

Special Protective Equipment for Firefighters:

Specific Methods:

No information available.

and full protective gear

pressure-demand, MSHA/NIOSH (approved or equivalent)

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:

No information available.

Methods for Cleaning Up:

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection:	Safety glasses. Safety glasses with side-shields.
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection:	Effective dust mask. Wear respirator with dust filter
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
	None	None	None	None
5-Nitroisophthalic Acid - 618-88-2				

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
5-Nitroisophthalic Acid	None	None	None	None
618-88-2				

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
5-Nitroisophthalic Acid	None	None
618-88-2		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.

Odor: No information available

Flash point (°C): Not applicable

Autoignition Temperature (°C/°F): No information available

Boiling point/range(°C/°F): No information available

Density (g/cm3): No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Solubility: No information available

Appearance: Powder.

Taste No information available

Lower Explosion Limit (%): No information available

pH: No information available

Decomposition temperature(°C/°F): No information available

Bulk density: No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available **Color:** White. Yellow.

Molecular/Formula weight: 211.13

Upper Explosion Limit (%): No information available

Melting point/range(°C/°F): 259-261 °C/498-502 °F

Specific gravity: No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY		
Stability:	Stable at normal conditions	
Conditions to avoid:	Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.	
Incompatible Materials:	Strong oxidizing agents. Strong bases.	
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx).	
Possibility of Hazardous Reactions:	No information available	
Polymerization:	Hazardous polymerisation does not occur	
Corrosivity:	No information available	
Special Remarks on Corrosivity:	No information available	

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

LD50/oral/mouse No inform LD50/dermal/rabbit = No inf LD50/dermal/rat = No inform LC50/inhalation/rat = No inf LC50/inhalation/mouse = N	LD50/oral/rat = No information available LD50/oral/mouse No information available LD50/dermal/rabbit = No information available LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No information available Other LD50 or LC50information =					
Product Information						
LC50/inhalation/rat No information LC50/Inhalation/mouse No inform LD50/dermal/rabbit No information LD50/dermal/rat No information av LD50/oral/mouse No information availa	aation available n available vailable Unit Unit available					
Local Effects						
Skin irritation:	May cause skin irritation.					
Eye irritation:	Causes eye irritation.					
Inhalation:	May cause irritation of respiratory tract.					
Ingestion:	Health injuries are not known or expected under normal use. May cause digestive (gastointestinal) tract irritation.					
Sensitization:	No information available					
Chronic Toxicity						
Chronic Toxicity	No information available.					
Carcinogenic effects:	No information available.					

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
5-Nitroisophthalic Acid	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Mutagenic Effects: No information available						
Reproductive Effect	s:	No information available				
Teratogenic Effects:	:	No information available				
Target Organs:		No information available				

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects:	No data available.
Aquatic toxicity:	No information available
Mobility:	No information available
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
5-Nitroisophthalic Acid	None	None	None	None
· · ·				

14. TRANSPORT INFORMATION

DOT UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: Marine Pollutant ERG No: DOT RQ (Ibs):	Not regulated No information available No information available None Not applicable No data available No information available No information available
TDG (Canada) UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: Description:	Not Regulated No information available No information available No information available No information available No information available
ADR UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: Classification Code: Description: CEFIC Tremcard No:	Not Regulated No information available No information available No information available No information available No information available No information available
UN-No: Proper Shipping Name: Hazard Class: Packing Group:	Not Regulated No information available No information available No information available

Subsidiary Risk: No information available **Description:** No information available IMDG Page: No information available Marine Pollutant No information available MFAG: No information available No information available **Maximum Quantity:**

RID

UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: Classification Code:	Not Regulated No information available No information available No information available No information available
Classification Code:	No information available
Description:	No information available

ICAO

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available
-	

ΙΑΤΑ

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
5-Nitroisophthalic Acid	Present	Not present	Not present	Not present	Present	Not present	210-568-3

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcment Act of 1986.

Chemicals Known to the State of California to Cause Cancer: This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity: This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen			Female Reproductive Toxicity:
5-Nitroisophthalic Acid	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

	Substances and their	Section 302 Extremely Hazardous Substances and TPQs	Hazardous	Section 313 - Chemical Category	Section 313 - Reporting de minimis
	Reportable Quantities	Substances and Trus	Substances and Nes		
5-Nitroisophthalic Acid	None	None	None	None	None

U.S. TSCA

	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
5-Nitroisophthalic Acid	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
5-Nitroisophthalic Acid	Not Listed	Present

Components		CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
5-Nitroisophthalic Acid	Not listed	Not listed

EU Classification

R-phrase(s)

R36 - Irritating to eyes.

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant.





16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date:	04-Jan-2013
Reason for revision:	Not applicable
Prepared by:	Sonia Owen
Literature reference:	No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.