

# Safety Data Sheet



## 1: Identification

### 1.1: Product Identifier

Product Name: NdI3

Product Number(s): 1NDI3-0018F

CAS Number: 13813-24-6

SDS Document Number: 000186

### 1.2: Recommended Uses and Restrictions

Recommended Uses

Manufacture of substances

Restrictions

Not for food or drug use.

### 1.3: Supplier Contact Information

APL Engineered Materials, Inc.

2401 N. Willow Rd.

Urbana, IL 61802

Phone: 217-367-1340

Fax: 217-367-9084

### 1.4: Emergency Phone Number

International: +01-813-248-0585

United States: 800-255-3924

## 2: Hazards Identification

### 2.1: Classifications

Sensitization - Respiratory - Category 1

Sensitization - Skin - Category 1

Skin Corrosion/Irritation - Category 1A

### 2.2: GHS Label Elements

Pictograms



Signal Word: Danger

Hazard Statements

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## Precautionary Statements

- P260: Do not breathe dust.
- P264: Wash hands thoroughly after handling.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P280: Wear protective gloves, clothing, and eyewear.
- P285: In case of inadequate ventilation wear respiratory protection.
- P303 + P361 + P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
- P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- P363: Wash contaminated clothing before reuse.
- P405: Store locked up.
- P501: Dispose of contents/container to licensed disposal facility.

## 2.3: Hazards Not Otherwise Classified or Not Covered by GHS

None.

## 2.4: Amount(s) of substances with unknown toxicity

None

## 3: Composition/Information on Ingredients

3.1: .Ingredient	.Weight%	.Formula	.CAS Number	.Mol Wt	.EC Number
NdI3	100	NdI3	13813-24-6	524.95	237-467-7

## 3.2: Other Hazardous components

none

## 3.3: Trade Secret Disclaimer

none

## 3.4: Synonyms

Neodymium (III) Iodide  
Neodymium triiodide

## 4: First Aid Measures

### 4.1: First Aid

#### General

- Consult with physician and provide this Safety Data Sheet
- Remove person from area of exposure and remove any contaminated clothing

#### In contact with eyes

- Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- Seek medical attention if irritation develops or persists

#### In contact with skin

- Wash thoroughly with soap and plenty of water. Remove all contaminated clothing for proper laundering. Seek medical attention if irritation develops or persists.

If swallowed

If conscious and alert, rinse mouth and drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical aid.

If inhaled

Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

#### 4.2: Most important symptoms and effects; acute and delayed

Causes severe burns.

Inhalation may cause respiratory sensitization.

Causes severe eye damage.

May cause an allergic skin reaction.

#### 4.3: Indication of any immediate medical attention and special treatment needed

If in Eyes: Immediately call a POISON CENTER or doctor/ physician.

### 5: Fire Fighting Measures

#### 5.1: Fire extinguishing media

carbon dioxide

dry chemical

water or alcohol-resistant foam

#### 5.2: Specific hazards arising from the substance or mixture

neodymium oxides

hydroiodic acid and hydroiodic acid fumes

#### 5.3: Special protective equipment and precautions for firefighters.

Wear self contained breathing apparatus for fire fighting if necessary

### 6: Accidental Release Measures

#### 6.1: Personal precautions, protective equipment, and emergency procedures.

Avoid dust formation.

Avoid breathing dust.

For personal protection see section 8.

Evacuate personnel to safe areas.

Ensure adequate ventilation.

Use personal protective equipment.

#### 6.2: Methods and materials for containment and cleaning up.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

#### 6.3: Environmental precautions

Do not let product enter drains.

#### 6.4: Disposal

Dispose of in accordance with local regulations.

See section 13.

## **7: Handling and Storage**

### **7.1: Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

Avoid formation of dust and aerosols.

Avoid contact with skin and eyes.

See precautionary statements in section 2.2.

### **7.2: Conditions for safe storage**

Store under inert gas.

Store in the dark to preserve product quality.

Store away from moisture.

Store in a dry and well-ventilated place.

Keep container tightly closed.

### **7.3: Incompatibilities**

strong oxidizing agents

moisture sensitive

## **8: Exposure Controls/Personal Protection**

### **8.1: Control parameters**

OSHA permissible exposure limit (PEL)

not listed

ACGIH threshold limit value (TLV)

not listed

NIOSH recommended exposure limit (REL)

not listed

### **8.2: Engineering controls**

Use adequate ventilation to keep airborne concentrations low

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower

### **8.3: Personal protective equipment**

Eyes

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin

Wear appropriate, chemical-resistant protective gloves to prevent skin exposure.

Clothing

Wear appropriate protective clothing to prevent skin exposure

Respirator

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary

## 9: Physical and Chemical Properties

### 9.a: Appearance

State: Solid

Form: powder or spheres

Color: black

### 9.b: Odor: odorless

### 9.c: Odor threshold: no data available

### 9.d: pH: no data available

### 9.e: Melting point / freezing point: no data available

### 9.f: Initial boiling point and range: no data available

### 9.g: Flashpoint: no data available

### 9.h: Evaporation rate: no data available

### 9.i: Flammability (solid, gas): no data available

### 9.j: Upper/lower flammability or explosive limits: no data available

### 9.k: Vapor pressure: no data available

### 9.l: Vapor density: no data available

### 9.m: Relative density: no data available

### 9.n: Water Solubility: no data available

### 9.o: Partition coefficient: n-octanol/water: no data available

### 9.p: Auto-ignition temperature: no data available

### 9.q: Decomposition temperature: no data available

### 9.r: Viscosity: no data available

## 10: Stability and Reactivity

### 10.1: Reactivity

no data available

### 10.2: Chemical stability

Stable under recommended storage conditions.

### 10.3: Possibility of hazardous reactions

no data available

### 10.4: Conditions to avoid

exposure to light (may affect product quality)

exposure to water

### 10.5: Incompatible materials

See section 7.3.

### 10.6: Hazardous decomposition products

In the event of fire: see section 5.2

Other decomposition products - no data available

## 11: Toxicological Information

### 11.1: Toxicity data

Acute toxicity - Oral

no data available

Acute toxicity - Dermal

no data available

Acute toxicity - Inhalation

No data available.

Skin corrosion/irritation

Prolonged or repeated exposure may cause allergic skin reactions in certain sensitive individuals.

Causes severe skin burns

Eye damage/irritation

Causes serious eye damage

Respiratory irritation

Prolonged or repeated exposure may cause allergic respiratory reactions in certain sensitive individuals.

Germ cell mutagenicity

no data available

Reproductive toxicity

Suspected reproductive toxicant.

Specific organ toxicity - single exposure

May cause respiratory irritation.

Specific organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available.

ACGIH carcinogenicity

The ACGIH has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

IARC carcinogenicity

The IARC has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

NTP carcinogenicity

The NTP has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

OSHA carcinogenicity

OSHA has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

### 11.2: Routes of exposure

oral

See section 2.2

eyes

skin

### 11.3: Symptoms of exposure

See section 4.2

### 11.4: Delayed and immediate effects of exposure

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

## 12: Ecological Information

### 12.1: Ecotoxicity

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available

Toxicity to algae/bacteria

No data available

### 12.2: Persistence and degradability

no data available

### 12.3: Bioaccumulative potential

no data available

### 12.4: Mobility in soil

no data available

### 12.5: Other effects

no data available

## 13: Disposal Considerations

### 13.1: Waste treatment methods

No data available

### 13.2: Safe handling

See section 7.1 .

### 13.3: Product disposal

Contact a licensed professional waste disposal service to dispose of this material.

### 13.4: Packaging disposal

Dispose of as unused product.

## 14: Transport Information

### 14.1: DOT(US)

UN Number: Not a dangerous good

Proper Shipping Name:

Packing Group:

Shipping Class(es): 0

Marine Pollutant: No

#### 14.2: IMDG

UN Number: Not a dangerous good

Proper Shipping Name:

Packing Group:

Shipping Class(es): 0

Marine Pollutant: No

#### 14.3: IATA

UN Number: Not a dangerous good

Proper Shipping Name:

Packing Group:

Shipping Class(es): 0

#### 14.4: Special Shipping Precautions

None

## 15: Regulatory Information

#### 15.1: TSCA inventory

This material is listed on the TSCA inventory.

#### 15.2: SARA 302 components

This material is not subject to the reporting requirements of SARA Title III, Section 302.

#### 15.3: SARA 313 components

This material is not subject to the reporting requirements of SARA Title III, Section 313.

#### 15.4: SARA 313/312 hazards

Chronic health hazard.

#### 15.5: Other information

Massachusetts Right To Know Components - This product does not contain materials listed on the Massachusetts Right to Know list

Pennsylvania Right To Know Components -This product does not contain materials listed on the Pennsylvania Right to Know list

New Jersey Right To Know Components -This product does not contain materials listed on the New Jersey Right to Know list

California Prop. 65 Components - This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16: Additional Information

#### 16.1: NFPA

Health: 1

Fire: 0



Reactivity: 0

Special:

#### 16.2: HMIS

Health: 1

Chronic: \*

Flammability: 0

Physical Hazard: 0

#### 16.3: Disclaimers

For industrial use only. Not for drug, household or other uses

The information herein is believed to be accurate and reliable as of the date compiled. However, APL Engineered Materials, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.

#### 16.4: References

Information contained on this SDS sheet was obtained from some or all of the following sources: American Conference of Governmental Industrial Hygienists (ACGIH), TLVs and BEIs; National Institute for Occupational Safety and Health (NIOSH), Pocket Guide to Chemical Hazards; European Chemicals Agency, <http://echa.europa.eu/>; The National Institute of Health, U.S National Library of Medicine, TOXNET, Toxicology Data Network; and the Registry of Toxic Effects of Chemical Substances (RTECS) database.

#### 16.5: Version

Preparation Date: 5/22/2015

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