



## **N-iodo succinimide CAS No.516-12-1**

### **SECTION 1**

MSDS : N-Iodosuccinimide

CAS : 516-12-1

SYNONYMS : NIS; 1-Iodo-2,5-Pyrrolidinedione; Succinodimide.

### **\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\***

CAS	Chemical Name	%	EINECS#
516-12-1	N-Iodosuccinimide	ca 100	208-221-6

Hazard Symbols: XI

Risk Phrases: 36/37/38

### **\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\***

#### **EMERGENCY OVERVIEW**

Irritating to eyes, respiratory system and skin. Light sensitive. Moisture sensitive.

Potential Health Effects

Eye: Causes eye irritation. May cause chemical conjunctivitis.

Skin: Causes skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation: Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Can produce delayed pulmonary edema.

Chronic: Effects may be delayed.

**\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\***

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

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

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

**\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\***

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:**

Use agent most appropriate to extinguish fire. Do NOT get water inside containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\***

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers.

**\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\***

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Store protected from light. Do not allow contact with water. Wash clothing before reuse. Keep from contact with moist air and steam.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Storage under a nitrogen blanket has been recommended. Store protected from moisture. Store protected from light.

**\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\***

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 516-12-1:

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 protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

**\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\***

Physical State: Powder

Color: off-white - beige powder

Odor: none reported

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 197 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: > 200 deg C

Solubility in water: decomposes in water

Specific Gravity/Density:

Molecular Formula: C<sub>4</sub>H<sub>4</sub>NO<sub>2</sub>

Molecular Weight: 224.99

**\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\***

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

Incompatible materials, light, dust generation, moisture, excess

heat. Incompatibilities with Other Materials: Moisture.  
Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen,  
irritating and toxic fumes and gases, carbon dioxide, iodide.  
Hazardous Polymerization: Has not been reported

**\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\***

RTECS#:  
CAS# 516-12-1: WN2817000  
LD50/LC50:  
Not available.  
Carcinogenicity:  
N-Iodosuccinimide -  
Not listed by ACGIH, IARC, or NTP.  
Other:  
See actual entry in RTECS for complete information.

**\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\***

No Available

**\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\***

Dispose of in a manner consistent with federal, state, and local regulations.

**\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\***

IATA  
Not regulated as a hazardous material.  
IMO  
Not regulated as a hazardous material.  
RID/ADR  
Not regulated as a hazardous material.

**\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\***

European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols: XI  
Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases: S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water.S 37 Wear suitable gloves.

S 37/39 Wear suitable gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 516-12-1: No information available.

Canada

CAS# 516-12-1 is listed on Canada's DSL List.

CAS# 516-12-1 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 516-12-1 is not listed on the TSCA inventory.

It is for research and development use only.

\*\*\*\* **SECTION 16 - ADDITIONAL INFORMATION** \*\*\*\*

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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