

# Material Safety Data Sheet

## Sodium amide

ACC# 01600

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium amide

**Catalog Numbers:** AC197050000, AC197050010, AC197051000, AC197055000, AC339240000, AC339240250, AC339241000, NC9654303, XXSDAM750G

**Synonyms:** Sodamide.

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7782-92-5	Sodium amide	>95	231-971-0

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white crystalline powder.

**Danger!** Causes eye and skin burns. Causes digestive and respiratory tract burns. Reacts violently with water. May form explosive peroxides.

**Target Organs:** Eyes, skin, mucous membranes.

#### Potential Health Effects

**Eye:** Causes eye burns. May cause eye injury.

**Skin:** Causes skin burns.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Causes gastrointestinal tract burns.

**Inhalation:** May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

**Chronic:** No information found.

### 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 immediately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

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

**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. Sodium amide reacts violently with water forming NaOH and NH<sub>3</sub>.

**Extinguishing Media:** Use dry sand or earth to smother fire. Do NOT use carbon dioxide. DO NOT USE WATER OR FOAM.

**Flash Point:** Not available.

**Autoignition Temperature:** 450 deg C ( 842.00 deg F)

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: ; Instability;; Special Hazard: -W-

### 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. Provide ventilation. Do not get water inside containers.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket. Water free area. Containers should be dated when opened and tested periodically for the presence of peroxides. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

## 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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium amide	none listed	none listed	none listed

**OSHA Vacated PELs:** Sodium amide: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** grey - white

**Odor:** ammonia-like

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 400 deg C

**Freezing/Melting Point:** 210 deg C

**Decomposition Temperature:** 500 deg C

**Solubility:** Reacts

**Specific Gravity/Density:** Not available.

**Molecular Formula:** H<sub>2</sub>NNa

**Molecular Weight:** 39.01

## Section 10 - Stability and Reactivity

**Chemical Stability:** When exposed to the atmosphere, sodium amide rapidly absorbs H<sub>2</sub>O and CO<sub>2</sub>. When only limited absorption takes place, as in poorly sealed containers, products are formed which render the resulting mixture highly explosive. The formation of oxidation products is accompanied by the development of a yellow/brownish color. If discoloration is noticed, the substance should be destroyed at once by covering with much benzene, toluene, or kerosene and slowly adding diluted ethanol with stirring.

**Conditions to Avoid:** Ignition sources, dust generation, exposure to air, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Potassium chlorates, chromic anhydride, Sodium amide reacts violently with water forming NaOH and NH<sub>3</sub>. The reaction with alcohol is considerably slower.

**Hazardous Decomposition Products:** Nitrogen oxides, ammonia, sodium hydroxide.

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 7782-92-5 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 7782-92-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Mutagenicity:** No data available.

**Neurotoxicity:** No data available.

## Other Studies:

### Section 12 - Ecological Information

No information available.

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

### Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	WATER-REACTIVE SOLID, CORROSIVE, N.O.S.	WATER-REACTIVE SOLID, CORROSIVE, N.O.S. (SODIUM AMIDE)
<b>Hazard Class:</b>	4.3	4.3
<b>UN Number:</b>	UN3131	UN3131
<b>Packing Group:</b>	II	II

### Section 15 - Regulatory Information

#### US FEDERAL

##### TSCA

CAS# 7782-92-5 is listed on the TSCA inventory.

##### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

##### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

##### Section 12b

None of the chemicals are listed under TSCA Section 12b.

##### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

##### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

##### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

##### Section 313

No chemicals are reportable under Section 313.

##### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

##### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

##### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

##### STATE

CAS# 7782-92-5 can be found on the following state right to know lists: New Jersey.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

#### European/International Regulations

##### European Labeling in Accordance with EC Directives

##### Hazard Symbols:

F C

##### Risk Phrases:

R 14/15 Reacts violently with water liberating extremely flammable gases.

R 19 May form explosive peroxides.

R 34 Causes burns.

##### Safety Phrases:

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

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 7/8 Keep container tightly closed and dry.

S 43D In case of fire, use sodium carbonate or dry sand (never use water).

**WGK (Water Danger/Protection)**

CAS# 7782-92-5: 2

**Canada - DSL/NDSL**

CAS# 7782-92-5 is listed on Canada's DSL List.

**Canada - WHMIS**

not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

Section 16 - Additional Information
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**MSDS Creation Date:** 10/14/1999

**Revision #3 Date:** 10/03/2005

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