

Cab. 8

# Material Safety Data Sheet

Sodium metasilicate, nonahydrate

Granular

ACC# 01516

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium metasilicate, nonahydrate

**Catalog Numbers:** AC419590030, AC419590060, AC419590250, AC419595000, S408-3, S408-500

**Synonyms:** Disodium metasilicate nonahydrate; Sodium metasilicate nonahydrate; Disodium trioxosilicate nonahydrate; Sodium silicate nonahydrate.

**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 |
|------------|---------------------------------|---------|---------------|
| 13517-24-3 | Sodium metasilicate nonahydrate | 100     | unlisted      |

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Appearance: colorless or white solid.

**Danger!** Causes eye and skin burns. Causes digestive and respiratory tract burns. Corrosive to metal in aqueous solution.

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

#### Potential Health Effects

**Eye:** Causes eye burns. May cause chemical conjunctivitis and corneal damage.

**Skin:** Causes skin burns.

**Ingestion:** Causes gastrointestinal tract burns.

**Inhalation:** Causes chemical burns to the respiratory tract.

**Chronic:** Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Chronic inhalation may cause lung damage, bronchitis, and silicosis. May decrease blood clotting.

## Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:** If inhaled, remove to fresh air. 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. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 0; Instability: 0

## 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.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

**Storage:** Store in a cool, dry place. Keep container closed when not in use. Corrosives area.

## 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 metasilicate nonahydrate | none listed | none listed | none listed       |
| Sodium metasilicate anhydrous   | none listed | none listed | none listed       |

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

Sodium metasilicate anhydrous: No OSHA Vacated PELs are listed for this chemical.

**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 a respirator's use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** colorless or white

**Odor:** none reported

**pH:** 13 (1% solution)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 47.8 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Very soluble in water

**Specific Gravity/Density:** 2.61 (anhy)

**Molecular Formula:** Na<sub>2</sub>SiO<sub>3</sub>·9H<sub>2</sub>O

**Molecular Weight:** 284.19

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Dust generation, excess heat.

**Incompatibilities with Other Materials:** Metals, acids.

**Hazardous Decomposition Products:** Silicon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 13517-24-3 unlisted.

**CAS#** 6834-92-0: VV9275000

**LD50/LC50:**

Not available.

**CAS#** 6834-92-0:

Draize test, rabbit, skin: 250 mg/24H Severe;

Oral, mouse: LD50 = 770 mg/kg;

Oral, rat: LD50 = 1153 mg/kg;

**Carcinogenicity:**

CAS# 13517-24-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 6834-92-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.**Teratogenicity:** No information found.**Reproductive Effects:** No information found.**Mutagenicity:** No information found.**Neurotoxicity:** No information found.**Other Studies:**

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| Section 12 - Ecological Information |
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**Ecotoxicity:** No data available. No information available.**Environmental:** Readily soluble in water therefore mobility is high.**Physical:** No information available.**Other:** No information available.

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| Section 13 - Disposal Considerations |
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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.

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| Section 14 - Transport Information |
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|                       | US DOT                  | Canada TDG                                    |
|-----------------------|-------------------------|-----------------------------------------------|
| <b>Shipping Name:</b> | DISODIUM TRIOXOSILICATE | Disodium Trioxosilicate (SODIUM METASILICATE) |
| <b>Hazard Class:</b>  | 8                       | 8                                             |
| <b>UN Number:</b>     | UN3253                  | UN3253                                        |
| <b>Packing Group:</b> | III                     | III                                           |

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| Section 15 - Regulatory Information |
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**US FEDERAL****TSCA**

CAS# 13517-24-3 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

CAS# 6834-92-0 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.

#### **CALIFORNIA 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.

#### **SARA Codes**

CAS # 13517-24-3: acute, chronic.

CAS # 6834-92-0: acute.

**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# 13517-24-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 6834-92-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

#### **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:**

C

##### **Risk Phrases:**

R 34 Causes burns.

R 37 Irritating to respiratory system.

##### **Safety Phrases:**

S 13 Keep away from food, drink and animal feeding stuffs.

S 24/25 Avoid contact with skin and eyes.

S 36/37/39 Wear suitable protective clothing, 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# 13517-24-3: 1

CAS# 6834-92-0: 1

##### **Canada - DSL/NDL**

CAS# 6834-92-0 is listed on Canada's DSL List.

##### **Canada - WHMIS**

This product has a WHMIS classification of E.

##### **Canadian Ingredient Disclosure List**

CAS# 6834-92-0 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 4/05/1997

**Revision #6 Date:** 11/29/2004

*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 event shall Fisher 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 Fisher has been advised of the possibility of such damages.*