



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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MSDS No. SS 700
Effective Date September 10, 1998

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

| | | | | | | | | | | | | | | | | | | |
|--------------------------|-------------------|---|----------|--------|----------|------|---------|---|---|---|---|---|--------|---|------|---|------------|---|
| Product | SODIUM NITRITE |  <p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING</p> <table border="1"> <tr> <td>LEAST</td> <td>SLIGHT</td> <td>MODERATE</td> <td>HIGH</td> <td>EXTREME</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table> <p>HMIS*</p> <table border="1"> <tr> <td>Health</td> <td>2</td> </tr> <tr> <td>Fire</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>3</td> </tr> </table> | LEAST | SLIGHT | MODERATE | HIGH | EXTREME | 0 | 1 | 2 | 3 | 4 | Health | 2 | Fire | 0 | Reactivity | 3 |
| LEAST | SLIGHT | | MODERATE | HIGH | EXTREME | | | | | | | | | | | | | |
| 0 | 1 | | 2 | 3 | 4 | | | | | | | | | | | | | |
| Health | 2 | | | | | | | | | | | | | | | | | |
| Fire | 0 | | | | | | | | | | | | | | | | | |
| Reactivity | 3 | | | | | | | | | | | | | | | | | |
| Chemical Synonyms | Diazotizing Salt | | | | | | | | | | | | | | | | | |
| Formula | NaNO ₂ | | | | | | | | | | | | | | | | | |
| Unit Size | up to 2.5 Kg. | | | | | | | | | | | | | | | | | |
| C.A.S. No. | 7632-00-0 | | | | | | | | | | | | | | | | | |

SECTION II INGREDIENTS OF MIXTURES

| Principal Component(s) | % | TLV Units |
|------------------------|--------------|-------------------|
| Sodium Nitrite | 97-100% | None established. |
| Sodium Nitrate | Approx. 0.3% | None established. |

WARNING! STRONG OXIDIZER! CONTACT WITH COMBUSTIBLE MATERIALS

MAY CAUSE FIRE OR EXPLOSION. HARMFUL IF SWALLOWED.

SECTION III PHYSICAL DATA

| | | | |
|------------------------|---|---|--------------------|
| Melting Point (°F) | 271°C (520°F) | Specific Gravity (H ₂ O = 1) | 2.168 at 20°C |
| Boiling Point (°F) | Decomposes 320°C (610°F) | Percent Volatile by Volume (%) | Non-volatile (NA). |
| Vapor Pressure (mm Hg) | Negligible as solid. | Evaporation Rate (n-Butyl Acetate = 1) | Non-volatile (NA). |
| Vapor Density (Air=1) | 2.39 | | |
| Solubility in Water | 46 grams in 100 mL. water at 20°C. | | |
| Appearance & Odor | White to slightly yellow granules or powder; no odor. | | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | | | | | |
|----------------------------------|----------------------------|-------------------------------------|---------|-------|-------|
| Flash Point (Method Used) | Explodes at 538°C (1000°F) | Flammable Limits in Air % by Volume | Unknown | Lower | Upper |
| Extinguisher Media | Flood with water. | | | | |

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Use flooding amounts of water in early stages of fire.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 140)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Oxidizing material. If Sodium Nitrite is in contact with easily oxidizable substances, violent combustion or explosion may result upon ignition from any source. Increases the flammability of any combustible substance. Explodes when heated over 1000°F. At high temperatures 600°-750°F or above, will give off toxic oxides of nitrogen fumes.

D.O.T. SODIUM NITRITE, 5.1, UN 1500, PG III

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

SS 700

Threshold Limited Value None established. (ACGIH 1992-93).

Effects of Overexposure **INHALATION:** Harmful if inhaled. Overexposure to high dust concentration may result in persistent headache, dizziness, nausea, vomiting, cyanosis, coma, convulsions, and death. **EYES:** May cause eye irritation. **SKIN:** May cause irritation. **INGESTION:** May be harmful or fatal if swallowed. Effects of overexposure are the same as by the inhalation route. This compound is a vasodilator and forms methemoglobin.

Emergency and First Aid Procedures **EYES:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **SKIN:** Flush with water, then wash with soap and plenty of water. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink. Induce vomiting. Repeat until vomit fluid is clear. Call a physician immediately. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If illness or discomfort develops, get medical attention.

SECTION VI REACTIVITY DATA

| | | | |
|------------------|-----------------|---|---|
| Stability | Unstable | | Conditions to Avoid Temperatures above 320°C or contact with acid liberates poisonous brown fumes of N ₂ O ₃ (Nitrogen Trioxide). Permanganate, Sulfites, Tannic Acid. |
| | Stable | X | |

Incompatibility (Materials to Avoid) Strong reducers, strong acids, organic materials, cyanides, ammonium salt, cellulose, sodium thiosulfate, acetanilide, antipyrine, chlorates, hypophosphite, iodides, mercury salts.

Hazardous Decomposition Products Gaseous nitrogen oxides, which are toxic and are oxidizers. Leaves caustic residue.

| | |
|---------------------------------|----------------------------|
| Hazardous Polymerization | Conditions to Avoid |
| May Occur | Will Not Occur |
| | X |
| | Not applicable. |

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Wear protective safety equipment. Use adequate ventilation. Avoid raising dust. Sweep up and place in a suitable container. Do not allow to remain in contact with combustibles. Flush spill area with water.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. Dissolve in water and flush to sewer with large amounts of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

| | | | |
|--|--|-----------------------|--------------------------|
| Respiration Protection (Specify Type) | None required in normal laboratory handling. If dusty, work in ventilation hood or wear a standard NIOSH/MSHA-approved particulate respirator. | | |
| Ventilation | Local Exhaust | Recommended. | Special |
| | Mechanical (General) | Recommended. | Other |
| Protective Gloves | For repeated contact wear rubber gloves. | Eye Protection | Chemical safety glasses. |
| Other Protective Equipment | Smock, apron, eye wash station, ventilation hood, proper gloves. | | |

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Keep container tightly closed when not in use. Keep container tightly closed when not in use. Read label on container before using. Do not wear contact lenses when working with chemicals. Mixtures with incompatible materials may react violently or explode. Sodium Nitrite should not be mixed in quantity with other chemicals except when the behavior of the mixture is known in advance. Remove and wash contaminated clothing.

Other Precautions For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 5 | Date 9/10/98 | Approved Michael Raszeja | Chemical Safety Coordinator MR

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