



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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(716) 226-6177

MSDS No. PP 670  
Effective Date October 27, 1998

## SECTION V HEALTH HAZARD DATA

PP 670

### Threshold Limited Value

None established. (ACGIH 1992-93).

### Effects of Overexposure

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

### Emergency and First Aid Procedures

**EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **SKIN:** Flush with water, then wash with soap and 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. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

## SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Elevated temperatures. Temperature of 350°C: starts decomposition. Temperatures of 538°C: causes explosion.
	Stable	X	

Incompatibility (Materials to Avoid)	Oxidizable materials, cyanides, ammonium salts, thiosulfates, combustible materials, organic materials.
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Hazardous Decomposition Products	Gaseous nitrogen oxides, which are toxic and are oxidizers. Leaves caustic residue.
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

## SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Wearing personal protective equipment, sweep up and place in a suitable container for proper disposal. Do not allow to remain in contact with combustibles. Flush spill area with water.
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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.
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Dispose of in accordance with local, state and federal regulations.

## 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 particulate respirator.
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Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Smock, apron, eye wash station, proper gloves, ventilation hood, goggles.
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## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from combustibles and wood floors. Ignites with friction when in contact with organic materials. Avoid acids. Wash thoroughly after handling. Remove and wash contaminated clothing.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Mixtures with incompatible materials may react violently or explode. Potassium nitrite should not be mixed in quantity with other chemicals except when the behavior of the mixture is known in advance.

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

Revision	No. 5	Date	10/27/98	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards. Printed on recycled paper.

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	POTASSIUM NITRITE
Chemical Synonyms	Nitrous Acid, Potassium Salt
Formula	KNO <sub>2</sub>
Unit Size	up to 2.5 Kg.
C.A.S. No.	7758-09-0

CHEMTREC  
800-424-9300  
Day 716-226-6177

NFPA HAZARD RATING  
LEAST SLIGHT MODERATE HIGH EXTREME  
0 1 2 3 4

Health	2
Fire	0
Reactivity	3

HMIS \*  
3 4

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
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Potassium Nitrite	97%	None established.
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**DANGER! STRONG OXIDIZER! HARMFUL IF SWALLOWED OR INHALED.**

**CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE OR EXPLOSION.**

## SECTION III PHYSICAL DATA

Melting Point (°F)	387°C (728°F) dec. @ 350°C (662°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.915
Boiling Point (°F)	NA ; Explodes @ 538°C (1000°F)	Percent Volatile by Volume (%)	Not applicable.
Vapor Pressure (mm Hg)	Not applicable.	Evaporation Rate (n-butyl acetate =1)	Not applicable.
Vapor Density (Air=1)	Not applicable.		
Solubility in Water	74 @ 20°C.		
Appearance & Odor	White to cream colored crystals; odorless.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	NA	Lower	Upper
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Extinguisher Media	Flood with water spray; fog; carbon dioxide; or dry chemical.
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### SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Use flooding amounts of water in early stages of fire. When large quantities are involved in fire, nitrites may fuse or melt, in which condition, application of water may result in extensive scattering of molten material.

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

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Strong oxidizing material. In contact with easily oxidizable substances it may react rapidly enough to cause ignition, violent combustion or explosion. Increases the flammability of any combustible substance. Yields toxic gaseous oxides of nitrogen when involved in fire.

Explosion Temperature: 538°C (1000°F).

D.O.T. POTASSIUM NITRITE, 5.1, UN 1488, PG II

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