Sodium Nitrate Solution, 1.0M

MSDS # 683.30

Section 1: Product and Company Identification

Sodium Nitrate Solution, 1.0M

Synonyms/General Names: Nitrate of soda
Product Use: For educational use only
Manufacturer: Columbus Chemical Industries, Inc., Columbus, WI 53925.

24 Hour Emergency Information Telephone Numbers

CHEMTREC (USA): 800-424-9300 **CANUTEC (Canada): 613-424-6666**

ScholAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2: Hazards Identification

Clear liquid, no odor.

HMIS (0 to 4)

Health	1
Fire Hazard	0
Reactivity	1

WARNING! Strong oxidizing agent and slightly toxic by ingestion.
Target organs: Red blood cells

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Section 3: Composition / Information on Ingredients

Sodium Nitrate (7631-99-4), >8-9%. Water (7732-18-5), 91-92%.

Section 4: First Aid Measures

Always seek professional medical attention after first aid measures are provided.

Eyes: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.
Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.
Ingestion: Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink. Induce vomiting immediately.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

Section 5: Fire Fighting Measures

Oxidizer. When heated to decomposition, emits acrid fumes of NOx.
Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is sensitive to mechanical impact. No sensitive to static discharge.

Section 6: Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all ignition sources and ventilate area. Contain spill with sand or absorbent material and place material in a sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

Section 7: Handling and Storage Yellow

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Shock and friction may cause material to explode.
Storage: Store in Oxidizer Storage Area [Yellow Storage] with other oxidizers and away from any combustible materials. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

Section 8: Exposure Controls / Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Exposure guidelines: Sodium Nitrate: OSHA PEL: Not Available, ACGIH: TLV: Not Available, STEL: Not Available.

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Section 9: Physical and Chemical Properties

Molecular formula	$NaNO_3$.	**Appearance**	Clear liquid.	
Molecular weight	84.99.	**Odor**	No odor.	
Specific Gravity	1.00 g/mL @ 20°C.	**Odor Threshold**	N/A.	
Vapor Density (air=1)	N/A.	**Solubility**	Soluble in water .	
Melting Point	N/A.	**Evaporation rate**	N/A.	*(Butyl acetate = 1).*
Boiling Point/Range	N/A .	**Partition Coefficient**	N/A.	*(log P_{OW}).*
Vapor Pressure (20°C)	N/A.	**pH**	N/A.	
Flash Point:	N/A.	**LEL**	N/A.	
Autoignition Temp.:	N/A.	**UEL**	N/A.	

N/A = Not available or applicable

Section 10: Stability and Reactivity

Stability: Stable under normal conditions of use and storage.
Incompatibility: Reducing agents, acids, combustibles, flammable materials.
Shelf life: Indefinite if stored properly.

Section 11: Toxicology Information

Acute Symptoms/Signs of exposure: ***Eyes***: Redness, tearing, itching, burning, conjunctivitis. ***Skin***: Redness, itching. ***Ingestion***: Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain. ***Inhalation***: Irritation of mucous membranes, coughing, wheezing, shortness of breath,
Chronic Effects: No information found.
Sensitization: none expected
Sodium Nitrate: LD50 [oral, rat]; 1267 mg/kg; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A
Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12: Ecological Information

Ecotoxicity (aquatic and terrestrial): Ecological impact has not been determined.

Section 13: Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

Section 14: Transport Information

DOT Shipping Name:	Not regulated by DOT.	**Canada TDG:**	Nor regulated by TDG.
DOT Hazard Class:		**Hazard Class:**	
Identification Number:		**UN Number:**	

Section 15: Regulatory Information

EINECS: Listed (231-554-3).
TSCA: All components are listed or are exempt.
WHMIS Canada: Not WHMIS controlled.
California Proposition 65: Not listed.

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

Section 16: Other Information

Current Issue Date: January 23, 2009
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