

MATERIAL SAFETY DATA SHEET

PART NUMBER: 905-752088
IDENTITY: CALIBRATION STANDARD 93% R.H.
MANUFACTURER: ROSEMOUNT ANALYTICAL INC.
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DATE REVISED: 01/26/11
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SECTION 1--MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS	%	OSHA PEL	ACGIH TLV	OTHER LIMIT RECOMMENDED
POTASSIUM NITRATE CAS# 7757-79-1	>95%			
NON-HAZARDOUS INGREDIENTS TOTAL	5 100			

No health hazard or other information is available for the solution of the mixture. The following sections are based on information obtained from <http://www.jtbaker.com/msds/englishhtml/P5950.htm> and our best scientific understanding of the solution.

SECTION 2--PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	400C (752F)
SPECIFIC GRAVITY (H ₂ O = 1)	2.1
VAPOR PRESSURE (mm Hg/TEMPERATURE)	Negligible @ 20C
MELTING POINT	333C (631F)
VAPOR DENSITY (AIR = 1)	3.00
EVAPORATION RATE (= 1)	No information found.
SOLUBILITY IN WATER	36 gm/100 ml water
WATER REACTIVE	Not Available
APPEARANCE AND ODOR	White crystals, odorless, clear in solution

SECTION 3--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT AND METHOD USE`	UNKNOWN
AUTO IGNITION TEMPERATURE	Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.
FLAMMABILITY LIMITS IN AIR BY VOLUME	UNKNOWN
LEL	
UEL	
EXTINGUISHER MEDIA	Dry chemical, carbon dioxide, Halon, water spray, or fog. If water is used, apply from as far a distance as possible. Water spray may be used to keep fire exposed containers cool. Do not allow water runoff to enter sewers or waterways.
SPECIAL FIRE FIGHTING PROCEDURE	Wear full protective clothing and breathing equipment for high-intensity fire or potential explosion conditions. This oxidizing material can increase the flammability of adjacent combustible materials.
UNUSUAL FIRE AND EXPLOSION HAZARD:	This oxidizing material can increase the flammability of adjacent combustible materials.

SECTION 4--REACTIVITY HAZARD DATA 905-752088

STABILITY STABLE x (solution form) UNSTABLE
CONDITIONS TO AVOID:

INCOMPATIBILITY MATERIALS TO AVOID: Heavy metals, phosphites, organic compounds, carbonaceous materials, strong acids, and many other substances.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and toxic metal fumes may form when heated to decomposition.

HAZARDOUS POLYMERIZATION: MAY OCCUR WILL NOT OCCUR x
HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID N/A

SECTION 5--HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: INHALATION x SKIN ABSORPTION x
INGESTION x NOT HAZARDOUS

CARCINOGEN LISTED: NPT IRAC OSHA NOT LISTED x

HEALTH HAZARDS

ACUTE: NOT LISTED

CHRONIC: Under some circumstances methemoglobinemia occurs in individuals when the nitrate is converted by bacteria in the stomach to nitrite. Nausea, vomiting, dizziness, rapid heart beat, irregular breathing, convulsions, coma, and death can occur should this conversion take place. Chronic exposure to nitrites may cause anemia and adverse effects to kidney.

SIGNS AND SYMPTOMS OF EXPOSURE:

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

EMERGENCY FIRST AID PROCEDURES:

EYE CONTACT: Causes irritation, redness, and pain.

SKIN CONTACT: Causes irritation to skin. Symptoms include redness, itching, and pain.

INHALATION: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

INGESTION: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. May cause gastroenteritis and abdominal pains. Purging and diuresis can be expected. Rare cases of nitrates being converted to the more toxic nitrites have been reported, mostly with infants.

SECTION 6--CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSHA/MSHA APPROVED RESPIRATOR

PROTECTIVE GLOVES: YES

EYE PROTECTION: YES

VENTILATION TO BE USED

LOCAL EXHAUST: YES

MECHANICAL (GENERAL): YES

SPECIAL OTHER (SPECIFY):

PROTECTIVE CLOTHING AND EQUIPMENT:

A particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash

fountain and quick-drench facilities in work area.

HYGIENIC WORK PRACTICES: YES

SECTION 7--PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified. Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

WASTE DISPOSAL METHODS:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

OTHER PRECAUTIONS AND/OR SPECIAL HAZARDS:

RATING:

HEALTH 1

FLAMMABILITY 0

REACTIVITY 3

SPECIAL OXY