

# MATERIAL SAFETY DATA SHEET

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **1M (10%) Potassium Nitrate Electrode Filling Solution**

Catalog Number: **RFOZZ1**

*Analytical Sensors & Instruments, Inc.*

*12800 Park One Drive*

*Sugar Land, TX USA 77478*

*Telephone Numbers: (281) 565-8818 (8am - 5pm CST)*

MSDS Number: RFOZZ1

Chemical Name: Not applicable

CAS No.: Not applicable

Chemical Formula: Not applicable

Chemical Family: Not applicable

Hazard: May cause irritation.

Date of MSDS Preparation:

Day: 7

Month: 24

Year: 2008

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Demineralized Water

CAS No.: 7732-18-5

TSCA CAS Number: 7732-18-5

Percent Range: 90

Percent Range Units: weight / weight

LD50: None reported

LC50: None reported

TLV: Not established

PEL: Not established

Hazard: No effects anticipated.

Potassium Nitrate

CAS No.: 7757-79-1

TSCA CAS Number: 7757-79-1

Percent Range: 10

Percent Range Units: weight / weight

LD50: Oral rat LD50 = 3750 mg/kg

LC50: None reported.

TLV: Not established.

PEL: Not established.

Hazard: Strong oxidizer, Causes skin and eye irritation.

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## 3. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance: Clear, colorless liquid

Odor: None

**MAY CAUSE EYE IRRITATION**

HMIS:

Health: 2

Flammability: 0

Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

NFPA:

Health: 2

Flammability: 0

Reactivity: 0

Symbol: Not applicable

Potential Health Effects:

Eye Contact: May cause slight irritation

Skin Contact: Prolonged exposure may cause slight irritation

Skin Absorption: No effects anticipated

Target Organs: Not applicable

Ingestion: Very large doses may cause: abdominal cramps weakness circulatory disturbances heart problems  
Target Organs: None reported  
Inhalation: No effects anticipated  
Target Organs: Not applicable  
Medical Conditions Aggravated: None reported  
Chronic Effects: None reported  
Cancer / Reproductive Toxicity Information:  
This product does NOT contain any OSHA listed carcinogens.  
This product does NOT contain any IARC listed chemicals.  
This product does NOT contain any NTP listed chemicals.  
Additional Cancer / Reproductive Toxicity Information: Potassium nitrate being investigated as teratogen or mutagen  
Toxicologically Synergistic Products: None reported

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#### 4. FIRST AID

Eye Contact: Flush eyes with water. Call physician if irritation develops.  
Skin Contact (First Aid): Wash skin with plenty of water.  
Ingestion (First Aid): Give 1-2 glasses of water. If you feel unwell, contact a physician.  
Inhalation: None required.

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#### 5. FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn.  
Flash Point: Not applicable  
Method: Not applicable  
Flammability Limits:  
Lower Explosion Limits: Not applicable  
Upper Explosion Limits: Not applicable  
Autoignition Temperature: Not applicable  
Hazardous Combustion Products: This material will not burn.  
Fire / Explosion Hazards: This product will not burn or explode.  
Static Discharge: None reported.  
Mechanical Impact: None reported  
Extinguishing Media: Use media appropriate to surrounding fire conditions  
Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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#### 6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:  
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.  
Containment Technique: Stop spilled material from being released to the environment.  
Clean-up Technique: Absorb spilled liquid with non-reactive sorbent material. Sweep up material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Decontaminate the area of the spill with a soap solution.  
Evacuation Procedure: Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.  
Special Instructions (for accidental release): Not applicable  
304 EHS RQ (40 CFR 355): Not applicable  
D.O.T. Emergency Response Guide Number: None allocated

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#### 7. HANDLING / STORAGE

Handling: Avoid contact with eyes Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.  
Storage: Keep container tightly closed when not in use.  
Flammability Class: Not applicable

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#### 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

Engineering Controls: Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.  
Personal Protective Equipment:  
Eye Protection: safety glasses with top and side shields  
Skin Protection: disposable latex gloves  
Inhalation Protection: adequate ventilation  
Precautionary Measures: Avoid contact with: eyes Wash thoroughly after handling.  
TLV: Not established  
PEL: Not established

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#### 9. PHYSICAL / CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid  
Physical State: Liquid  
Molecular Weight: Not applicable  
Odor: None  
pH: Not determined  
Vapor Pressure: Not determined  
Vapor Density (air = 1): Not determined  
Boiling Point: Not determined  
Melting Point: Not determined  
Specific Gravity (water = 1): ~1.06  
Evaporation Rate (water = 1): Not determined  
Volatile Organic Compounds Content: Not applicable  
Partition Coefficient (n-octanol / water): Not applicable  
Solubility:  
Water: Miscible  
    Acid: Miscible  
    Other: Not determined  
Metal Corrosivity:  
    Steel: Not determined  
    Aluminum: Not determined

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#### 10. STABILITY / REACTIVITY

Chemical Stability: Stable when stored under proper conditions.  
Conditions to Avoid: Evaporation Extreme temperatures  
Reactivity / Incompatibility: Incompatible with: None reported  
Hazardous Decomposition: None reported  
Hazardous Polymerization: Will not occur.

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#### 11. TOXICOLOGICAL INFORMATION

Product Toxicological Data:  
LD50: Calculated value for mixture is (oral rat LD50): 37,500 mg/L  
LC50: None reported  
Dermal Toxicity Data: None reported  
Skin and Eye Irritation Data: None reported  
Mutation Data: None reported  
Reproductive Effects Data: None reported  
Ingredient Toxicological Data: Potassium Nitrate: Oral rat LD50 = 3750 mg/kg

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#### 12. ECOLOGICAL INFORMATION

Product Ecological Information: --  
No ecological data available for this product.  
Ingredient Ecological Information: --  
No ecological data available for the ingredients of this product.

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#### 13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: None  
Special Instructions (Disposal): Open cold water tap completely, slowly pour the material to the drain.  
Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.  
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

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#### 14. TRANSPORT INFORMATION

D.O.T.:  
D.O.T. Proper Shipping Name: Not Currently Regulated  
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DOT Hazard Class: NA  
DOT Subsidiary Risk: NA  
DOT ID Number: NA  
DOT Packing Group: NA  
I.C.A.O.:  
I.C.A.O. Proper Shipping Name: Not Currently Regulated  
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ICAO Hazard Class: NA  
ICAO Subsidiary Risk: NA  
ICAO ID Number: NA  
ICAO Packing Group: NA  
I.M.O.:  
I.M.O. Proper Shipping Name: Not Currently Regulated

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I.M.O. Hazard Class: NA  
I.M.O. Subsidiary Risk: NA  
I.M.O. ID Number: NA  
I.M.O. Packing Group: NA

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#### 15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard.

(29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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302 (EHS) TPQ (40 CFR 355): Not applicable

304 CERCLA RQ (40 CFR 302.4): Not applicable

304 EHS RQ (40 CFR 355): Not applicable

Clean Water Act (40 CFR 116.4): Not applicable

RCRA: Contains no RCRA regulated substances.

C.P.S.C.: Not applicable

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.

Identification of Prop. 65 Ingredient(s): None

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

TSCA CAS Number: Not applicable

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#### 16. OTHER INFORMATION

Intended Use: Electrode filling solution

References: 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991.

In-house information. Technical Judgment.

Revision Summary: NA

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Legend: NA - Not Applicable w/w - weight/weight

ND - Not Determined w/v - weight/volume

NV - Not Available v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

ANALYTICAL SENSORS & INSTRUMENTS, INC. 2008