



AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291
Emergency Telephone No.: 800-535-5053

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: OR4200-A, OR4200-B, OR4200-C, OR4200-D, OR4200-P, OR4200-Q, OR4200-G, OR4200-T

Product Identity: ORP Std 200mV

Chemical Family: Not Applicable

Synonyms: Not Applicable

Recommended Use: Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291
Emergency Contact Number (24hr): InfoTrac (800) 535-5053

Issue Date: 01/19/07

Revision Date: 07/07/08, 07/02/10, 10/6/10

Section 2 – Hazard Identification

Emergency Overview: May cause irritation to the eyes and skin. Wash areas of contact with water.

Appearance: Clear, yellow to yellow-green liquid

Odor: Odorless

Target Organs: Eyes, skin, teeth, liver, mucous membrane, respiratory system

Potential Health Effects/ Routes of Exposure:

Eyes: May cause slight irritation

Skin: May cause slight irritation

Ingestion: May cause diarrhea, nausea, cramps, and vomiting

Inhalation: Not likely to be a hazard

Chronic Effect / Carcinogenicity: None (IARC, NTP, OSHA)

Aggravated Medical Conditions No information available

These chemicals are considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Potassium Ferricyanide, CAS# 13746-66-2, < 1% w/v

Potassium Ferrocyanide, CAS# 14459-95-1, <1% w/v

Potassium Chloride, CAS# 7447-40-7, <1% w/v

Water, purified, CAS# 7732-18-5, >97% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.

Ingestion: DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable **Autoignition Temperature** No information available.

Explosion Limits Upper No data available **Lower** No data available

Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Unsuitable Extinguishing Media: No information available
Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.
Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH-approved breathing equipment.
Hazardous Combustion Products: No information Available
Sensitivity to mechanical impact No information available.
Sensitivity to static discharge No information available.
Specific Hazards Arising from the Chemical: No information available
NFPA Rating: (estimated) Health: 2; Flammable: 0; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions Not relevant considering the small amounts used.

Methods for Containment and Clean Up Absorb with suitable material and treat as normal refuse. Small amounts may be flushed to sewer with large quantities of water. Always obey local regulations.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.

Storage: Keep container tightly closed. Protect from freezing and physical damage. Store in refrigerator.

Section 8 – Exposure Controls, Personal Protection

Potassium Ferricyanide, CAS# 13746-66-2, ACGIH TLV: NA, OSHA PEL: NA
Potassium Ferrocyanide, CAS# 14459-95-1, ACGIH TLV: NA, OSHA PEL: NA
Potassium Chloride, CAS# 7447-40-7, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Normal ventilation is adequate. Ensure eyewash and safety showers are available.

Personal Protection Equipment: Skin Protection: Chemical resistant gloves.

Eye/Face Protection: Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Clear, yellow to yellow-green liquid

Odor: Odorless

Boiling Point: Approx 100C

Melting Point: Approx 0C

Vapor Density: No Information Available

Evaporation Rate: No Information Available

pH: Not available

Flammability: No Information Available

Solubility: Infinite
available

Relative Density: No Information Available

% Volatility: No Information Available

Specific Gravity: Approx 1

Vapor Pressure: No Information Available

Flash Point: Not Applicable

Coefficient of water/oil distribution: Not Available

Odor Threshold: Not Available

Decomposition Temperature: No Information Available

Partition Coefficient n-octanol/water: No data

Molecular Weight: Not available

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatible Materials: Acids, sodium nitrate, ammonia, bromine trifluoride, cupric nitrate, chromium trioxide, chromic anhydride

Conditions to Avoid: No Information Available.

Hazardous Decomposition Products: Fumes of cyanide and oxides of carbon, potassium, and nitrogen

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2
LD50 orl-rat: 6400 mg/kg (Potassium Ferrocyanide), 2600mg/kg (Potassium Chloride)
LC50 inhalation-rat: NA
Irritation: No Information Available
Toxicologically Synergistic: No Information Available
Chronic Exposure
Carcinogenicity No Information Available
Sensitization No information available.
Mutagenic Effects No information available.
Reproductive Effects Cited for Potassium Ferrocyanide Trihydrate
Developmental Effects (Immediate/Delayed) No information available.
Teratogenicity Mutation data cited for potassium chloride and potassium ferricyanide.
Other Adverse Effects No Information Available.
Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: No information available.
Persistence and Degradability: No Information Available **Mobility:** No Information Available
Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Dilute with water and flush to sewer.
All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT – Not Regulated

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are considered hazardous by OSHA.
Canada DSL: These Chemicals are on the Canada DSL list.
TSCA: The components of this solution are listed on the TSCA Inventory
SARA Title III Section 313: Not Applicable
RCRA Status: Not Applicable
CERCLA Reportable Quantity: Not Applicable
WHMIS: Not Controlled

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.