

Section 1 - Chemical Product and Company Identification

GHS Product Identifier

S021

Product Name

Calomel Free pH electrode refill solution

Manufacturer Name

Sensorex Corporation

Recommended Use/ Restrictions on Use

Use as refill bridge electrolyte for calomel-free pH sensor. Not for household use.

Address (Number, Street, City, State and Zip Code)

11751 Markon Drive

Garden Grove, CA. 92841 USA

Emergency Telephone Number (24 hr) (800) 222-1222

American Association of Poison Control Centers

Telephone Number for Information

714-895-4344

Section 2 - Hazards Identification

GHS Classification: Oxidizing liquids (Category 3), H272

GHS Label Elements

Pictogram:

Signal Word:
Danger
Hazard Statements:

H272 - May intensify fire; oxidizer.

H412 - Harmful to aquatic life with long-lasting effects.

Precautionary Statements:

P210 - Keep away from heat.

P220 - Keep/store away from clothing/combustible materials.

P221 - Take any precaution to avoid mixing with combustibles.

P264 - Wash exposed skin thoroughly after handling.

P273 - Avoid release to environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

P321 - Specific treatment (see supplemental first aid instructions on this Safety Data Sheet.)

P363 - Wash contaminated clothing before reuse.

P370 + P378 - In case of fire: use dry sand, dry chemical or alcohol-resistant foam for extinction.

P405 - Store locked up.

P406 - Store in corrosive resistant stainless steel container with a resistant inner liner.

P501 - Dispose of contents/container to comply with local, state and federal regulations.

Other hazards not classified or covered by GHS: None

Section 3 - Composition/Ingredient information

Chemical Identity	CAS Registry #	EC#	Percent Weight (%)
Potassium Nitrate	7757-79-1	231-714-2	16
Deionized Water	7732-18-5	231-791-2	Balance

Section 4 - First Aid Measures

Description of Necessary First Aid Measures:

General: Consult a physician. Present this safety data sheet to the doctor in attendance. Move out of dangerous area.

IF INHALED: Move person into fresh air. If not breathing, perform rescue breathing and contact emergency medical personnel. If breathing is difficult, give oxygen.

SKIN CONTACT: Remove contaminated clothing and shoes immediately. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Wash clothing and shoes before reuse.

INGESTION: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

EYE CONTACT: Irrigate immediately with large quantity of water for at least 15 minutes. Get medical attention immediately.

Most important symptoms/effects, acute and delayed:

INHALATION: No data available.

SKIN CONTACT: No data available.

EYE CONTACT: No data available.

INGESTION: No data available.

AFTER ABSORPTION OF LARGE QUANTITIES: No data available.

AFTER REPEATED EXPOSURE: No data available.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:

No data available

Section 5 - Fire-fighting Measures

Suitable extinguishing media:

SUITABLE: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

UNSUITABLE: No unsuitable extinguishing media known.

Specific hazards arising from the chemical (combustion products):

No data available

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus for fire-fighting if necessary.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency responders:

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to Section 8 for Personal Protective Equipment.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable closed containers for disposal.

Section 7 - Handling and Storage

Precautions for safe handling:

Do not ingest. Do not get in eyes, skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibles:

Keep in tightly closed container. Store in a cool, dry, well-ventilated area.

INCOMPATIBLE MATERIALS: Strong reducing agents, powdered metals, strong acids, organic materials.

Section 8 - Exposure Controls/Personal Protection

Control parameters:

Contains no substances with occupational exposure limit values.

Appropriate Engineering Controls:

Handle in accordance with good industrial hygiene and safety practice. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Individual protection measures, personal protective equipment:

RESPIRATORY PROTECTION: For conditions of use where exposure to dust or mist is apparent, a properly fitted, air-purifying or air-fed respirator must be worn.

SKIN PROTECTION: Wear impervious clothing, boots, chemical resistant gloves, lab coat, apron or coveralls to prevent skin contact.

EYE PROTECTION: Use chemical safety goggles and or a full face shield where splash is possible. Maintain eyewash fountain.

Section 9 - Physical and Chemical Properties

APPEARANCE: Clear, colorless liquid	pH: 5.5 - 8
ODOR: Odorless	BOILING POINT (°C): Approximately 100
ODOR THRESHOLD: N/A	MELTING POINT (°C): Approximately 0
FLASH POINT: N/A	FLAMMABILITY: N/A
VAPOR PRESSURE: No data available	VAPOR DENSITY: No data available
RELATIVE DENSITY: 1	SOLUBILITY IN WATER: Infinite
	PARTITION COEFFICIENT (n-octanol/water): No data available
	UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available
	EVAPORATION RATE compared with (n-butyl acetate = 1): 0.36 (water)
VISCOSITY: No data available	AUTO-IGNITION TEMPERATURE: N/A
	DECOMPOSITION TEMPERATURE: No data available

Section 10 - Stability and Reactivity

REACTIVITY: Explosive in the presence of heat and oxidizers.	CHEMICAL STABILITY: Stable under normal conditions of use and storage.
CONDITIONS TO AVOID: No data available.	POSSIBILITY OF HAZARDOUS REACTIONS: No data available.
INCOMPATIBLE MATERIALS: Strong reducing agents, powdered metals, strong acids, organic materials.	HAZARDOUS DECOMPOSITION PRODUCTS: No data available

Section 11 - Toxicological Information

Acute toxicity: LD50 oral - rat: 3750 mg/kg (potassium nitrate)
Skin corrosion/irritation: Not classified.
Serious eye damage/irritation: Not classified.
Respiratory or skin sensitization: Not classified.
Germ cell mutagenicity: Not classified.
Carcinogenicity: Group 2A: probably carcinogenic to humans.
Reproductive toxicity: Not classified.
STOT Single exposure: Not classified.
STOT Repeated exposure: Not classified.
Aspiration hazard: Not classified.

Symptoms related to the physical, chemical and toxicological characteristics:

INHALATION: No data available.
SKIN CONTACT: No data available.
EYE CONTACT: No data available.
INGESTION: No data available.
AFTER ABSORPTION OF LARGE QUANTITIES: No data available.
AFTER REPEATED EXPOSURE: No data available.

Delayed and immediate effects also chronic from short and long term exposure:

INHALATION: No data available.
SKIN CONTACT: No data available.

Numerical measure of toxicity:

TOXICITY DATA United States: LD50 oral - rat: 3750 mg/kg (potassium nitrate)

Section 12 - Ecological Information

ECOTOXICITY:

Potassium Nitrate

Toxicity to fish: LC50 - *Gambusia affinis* (mosquito fish) - 22.5 mg/L - 96 hr.

Static test LC50 - *Poecilia reticulata* (guppy) - 1,378 mg/L - 96 hr.

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (water flea) - 226 mg/L - 72 hr.

PERSISTENCE AND DEGRADABILITY: No data available

BIOACCUMULATIVE POTENTIAL: No data available

MOBILITY IN SOIL: No data available

OTHER ADVERSE EFFECTS: No data available

Section 13 - Disposal Considerations

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal should be in accordance with all applicable regional, national and local laws and regulations.

Section 14 - Transportation Information

UN NUMBER: 1486

UN PROPER SHIPPING NAME: Potassium nitrate solution

TRANSPORT HAZARD CLASS(ES): 5.1

PACKING GROUP: III - Minor danger

ENVIRONMENTAL HAZARD: Marine pollutant: No

Section 15 - Regulatory Information - (NOT ALL INCLUSIVE)

UNITED STATES

SARA 302 No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
 SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313:

Potassium nitrate	CAS-No. 7757-79-1	Revision Date 2007-03-01
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SARA 311/312 Hazards: Reactivity Hazard, Chronic Health Hazard

Massachusetts Right To Know Components
 Potassium nitrate CAS-No. 7757-79-1 Revision Date 2007-03-01

Pennsylvania Right To Know Components
 Potassium nitrate CAS-No. 7757-79-1 Revision Date 2007-03-01

New Jersey Right To Know Components
 Potassium nitrate CAS-No. 7757-79-1 Revision Date 2007-03-01

California Prop. 65 Components
 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16 - Other Information

Date of preparation: April, 2015

This SDS replaces MSDS Calomel Free REFILL, REV C 05-12-2008.

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Sensorex Corporation assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.

Full text of Hazard Statements referred to in Section 2:

Acute aquatic toxicity
Chronic aquatic toxicity

H272 May intensify fire; oxidiser.
H402 Harmful to aquatic life.
H412 Harmful to aquatic life with long lasting effects.