1 Identification

- **Product identifier**
  - **Trade name:** Conductivity Standard Solution, 450µS/cm
  - **Product code:** CS0450SS
- **Recommended use and restriction on use**
  - **Recommended use:** Laboratory chemicals
  - **Restrictions on use:** No relevant information available.

Details of the supplier of the Safety Data Sheet

- **Manufacturer/Supplier:**
  - AquaPhoenix Scientific, Inc.
  - 860 Gitts Run Road
  - Hanover, PA 17331 USA
  - Tel +1 (717)632-1291
  - Toll-Free: (866)632-1291
  - info@aquaphoenixsci.com
- **Distributor:**
  - AquaPhoenix Scientific
  - 860 Gitts Run Road,
  - Hanover, PA 17331
  - (717) 632-1291
- **Emergency telephone number:**
  - ChemTel Inc.
  - (800)255-3924 (North America)
  - +1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Not regulated.
  - **Hazard pictograms:** Not regulated.
  - **Signal word:** Not regulated.
  - **Hazard statements:** Not regulated.
  - **Precautionary statements:** Not regulated.

- **Other hazards**
  - There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
  - **Components:**
    - 7732-18-5 Water >99.9%
    - 7447-40-7 Potassium chloride <0.1%

- **Additional information:** For the wording of the listed Hazard Statements, refer to section 16.
4 First-aid measures

· **Description of first aid measures**
  · **General information:** No special measures required.
  · **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  · **After skin contact:**
    Rinse with warm water.
    If skin irritation is experienced, consult a doctor.
  · **After eye contact:**
    Remove contact lenses if worn.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  · **After swallowing:**
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; immediately call for medical help.
  · **Most important symptoms and effects, both acute and delayed:**
    Gastric or intestinal disorders when ingested.
  · **Danger:** No relevant information available.
  · **Indication of any immediate medical attention and special treatment needed:**
    No relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
  · **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
  · **For safety reasons unsuitable extinguishing agents:** No relevant information available.
  · **Special hazards arising from the substance or mixture**
    Formation of toxic gases is possible during heating or in case of fire.
  · **Advice for firefighters**
  · **Protective equipment:**
    Wear self-contained respiratory protective device.
    Wear fully protective suit.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
  Ensure adequate ventilation.

· **Environmental precautions**
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Methods and material for containment and cleaning up**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Clean the affected area carefully; suitable cleaners are:
  Warm water
  Dispose of the collected material according to regulations.

· **Reference to other sections**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
7 Handling and storage

· Handling
  · Precautions for safe handling: No special measures required.
  · Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities
  · Requirements to be met by storerooms and receptacles: No special requirements.
  · Information about storage in one common storage facility: No relevant information available.
  · Further information about storage conditions:
    Keep containers tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
  · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters
  · Components with limit values that require monitoring at the workplace:
    The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

· Exposure controls
  · General protective and hygienic measures:
    The usual precautionary measures for handling chemicals should be followed.
    Keep away from foodstuffs, beverages and feed.
  · Engineering controls: Provide adequate ventilation.
  · Breathing equipment: Not required under normal conditions of use.
  · Protection of hands: Gloves not required under normal conditions of use.
  · Material of gloves
    Butyl rubber, BR
    Fluorocarbon rubber (Viton)
    Neoprene gloves
    Nitrile rubber, NBR
  · Penetration time of glove material
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  · Eye protection:
    Safety glasses
    Follow relevant national guidelines concerning the use of protective eyewear.
  · Body protection: Protective work clothing
  · Limitation and supervision of exposure into the environment No special requirements.
  · Risk management measures No special requirements.
9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **Appearance:**
    - Form: Liquid
    - Color: Clear
  - Odor: Odorless
  - Odor threshold: Not determined.
  - **pH-value:** Not determined.
  - **Melting point/Melting range:** Not determined.
  - **Boiling point/Boiling range:** 105-110 °C (221-166 °F)
  - **Flash point:** The product is not flammable.
  - **Flammability (solid, gaseous):** Not applicable.
  - **Auto-ignition temperature:** Not determined.
  - **Decomposition temperature:** Not determined.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Oxidizing properties:** Not determined.
  - **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)
  - **Density at 20 °C (68 °F):** >1.01 g/cm³ (>8.43 lbs/gal)
  - **Relative density:** Not determined.
  - **Vapor density:** Not determined.
  - **Evaporation rate:** Not determined.
  - **Solubility in / Miscibility with Water:** Fully miscible.
  - **Partition coefficient (n-octanol/water):** Not determined.
  - **Viscosity**
    - Dynamic: Not determined.
    - Kinematic: Not determined.
  - **Other information**
    - No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Light, excess heat, dust generation, incompatible materials.
- **Incompatible materials** No relevant information available.
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11 Toxicological information

Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification: None.
- Primary irritant effect:
  - On the skin: Based on available data, the classification criteria are not met.
  - On the eye: Based on available data, the classification criteria are not met.
  - Sensitization: Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer):
None of the ingredients are listed.

NTP (National Toxicology Program):
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):
None of the ingredients are listed.

Probable route(s) of exposure:
- Ingestion.
- Inhalation.
- Eye contact.
- Skin contact.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

Toxicity
- Aquatic toxicity No relevant information available.
- Persistence and degradability No relevant information available.
- Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- Additional ecological information
  - General notes: Generally not hazardous for water.
  - Other adverse effects No relevant information available.

13 Disposal considerations

Waste treatment methods
Trade name: Conductivity Standard Solution, 450µS/cm

- Recommendation:
  Smaller quantities can be disposed of with household waste.
  Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
  The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, ADR/RID/ADN, IMDG, IATA Not regulated.

- UN proper shipping name
  - DOT, ADR/RID/ADN, IMDG, IATA Not regulated.

- Transport hazard class(es)
  - DOT, ADR/RID/ADN, IMDG, IATA Class Not regulated.

- Packing group
  - DOT, ADR/RID/ADN, IMDG, IATA Not regulated.

- Environmental hazards Not applicable.

- Special precautions for user Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
    - SARA
      - Section 302 (extremely hazardous substances):
        None of the ingredients are listed.

      - Section 313 (Specific toxic chemical listings):
        None of the ingredients are listed.

    - TSCA (Toxic Substances Control Act)
      All ingredients are listed or exempt.

- Proposition 65 (California)
  - Chemicals known to cause cancer:
Trade name: Conductivity Standard Solution, 450µS/cm

None of the ingredients are listed.

- Chemicals known to cause developmental toxicity for females:
  None of the ingredients are listed.

- Chemicals known to cause developmental toxicity for males:
  None of the ingredients are listed.

- Chemicals known to cause developmental toxicity:
  None of the ingredients are listed.

- EPA (Environmental Protection Agency):
  None of the ingredients are listed.

- IARC (International Agency for Research on Cancer):
  None of the ingredients are listed.

- Canadian Domestic Substances List (DSL):
  All ingredients listed on DSL or NDSL.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Abbreviations and acronyms:
  ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  OSHA: Occupational Safety & Health Administration
  Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

- Sources
  Website, European Chemicals Agency (echa.europa.eu)
  Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
  Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
  Safety Data Sheets, Individual Manufacturers

SDS Prepared by:
ChemTel
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtel.com