

Material Safety Data Sheet



Subject: G0093 Mercury Sulfate Reference Electrode

Section 1: Product Identification

G0093 Mercury Sulfate Reference Electrode

Section 2: Composition/Information on Ingredients

Metallic Mercury, Mercury (I) Sulfate, Potassium Sulfate
MF: Hg, Hg₂SO₄, K₂SO₄
CAS #: [7439-97-6], [7783-35-9], [7778-80-5]

Section 3: Hazards Identification

Mercury Vapor TTL 0.05 Mg/M³, Mercury (I) sulfate is toxic if ingested, absorbed through the skin or inhaled. The sealed electrode only poses a problem if broken or opened. TVL 0.05 Mg/M³ as mercury.

Section 4: First Aid Measures

In case of contact, wash hands with soap and water, flush eyes immediately with copious amounts of water, consult a physician.

Section 5: Fire Fighting Measures

Not applicable

Section 6: Accidental Release Measures

If glass envelope is broken, sweep up debris wearing gloves to prevent getting cut and contact with chemicals. Sweep up and store in a container for proper disposal of mercury. Consult local government agencies for suggested procedure.

Section 7: Handling and Storage

Store in a box to prevent breakage. Wash hands thoroughly after use.

Section 8: Exposure Controls/Personal Protection

There is virtually no exposure to mercury or mercury sulfate with the glass envelope intact. Potassium sulfate solution is only harmful if gotten in the eyes. Wash hands after contact with the liquid. Avoid breaking the electrode.

Section 9: Physical and Chemical Properties

Mercury is a metal-appearing liquid; mercury sulfate is a white/yellowish powder, and potassium sulfate is a water-like solution. These components have no odor, pH is near 5-7; vapor pressure and density have not been determined; boiling point of potassium sulfate water solution is slightly above 100°C. The solids are insoluble in water. Mercury sulfate decomposed on boiling or melting. Sp. Gr. 7.56.

Section 10: Stability and Reactivity

The electrode is stable.

Section 11: Toxicological Information

POSITION

Section 12: Ecological Information

N/A

Section 13: Disposal Considerations

Mercury and Mercury (I) Sulfate should be disposed of as recommended by local EPA rules. Mercury can be sent to recycle companies.

Section 14: Transport Information

N/A

Section 15: Regulatory Information

N/A

Section 16: Other Information

Precautionary labeling DANGER POISON Do not ingest or inhale dust or vapors. Emits toxic gases on decomposition.

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