

**BACHARACH, INC.**  
**MATERIAL SAFETY DATA SHEET**

This Material Safety Data Sheet has been prepared to comply with the EC Directive, Canadian WHMIS and OSHA Hazard Communication Regulations.

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION  
AND THE COMPANY/UNDERTAKING**

Bacharach, Inc.  
621 Hunt Valley Circle  
New Kensington, PA 15068

Emergency Phone: (800) 424-9300 (Chemtrec)  
Information Phone: (724) 334-5760  
Fax: (724) 334-5763

**Product Name:** KCL Solution-Cell Electrolyte

**Product Number:** 3700-4200, 3700-4210

**MSDS Number:** 99-0078

**Revision Number:** 9

**Product Use:** Instrument Fluid

**MSDS Date of Preparation/Revision:** 7/30/04

**SECTION 2: COMPOSITION/ INFORMATION INGREDIENTS**

| Chemical Name      | CAS# / EINECS#        | %   | EU Classification (67/548/EEC) |
|--------------------|-----------------------|-----|--------------------------------|
| Potassium Chloride | 7447-40-7 / 231-211-8 | 15% | Xi R36                         |
| Water              | 7732-18-5 / 231-791-2 | 85% | Not Applicable                 |

See Section 16 for further information on EU Classification.

**SECTION 3: HAZARDS IDENTIFICATION**

Colorless, odorless liquid containing crystals of potassium chloride.

**Emergency Overview:** May cause mild, reversible eye and skin irritation.

**EU Preparation Classification (1999/45/EC):** Not a dangerous preparation

**SECTION 4: FIRST AID**

**Eye Contact:** Flush thoroughly with copious amounts of running water for 15 minutes. Get medical attention if irritation develops.

**Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing and launder before re-use. Get medical attention if irritation develops.

**Inhalation:** Overexposure by this route is extremely unlikely, however, if irritation develops remove victim to fresh air and get medical attention.

**Ingestion:** Never give anything by mouth to or induce vomiting with a person who is unconscious or convulsing. If the victim is conscious, give 2-4 glasses of water and induce vomiting. Get immediate medical attention.

**SECTION 5: FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** Not combustible

**Test Method:** N/A

**Autoignition Temperature:** N/A

**Flammable Limits:** LEL: N/A

UEL: N/A

**Extinguishing Media:** This product is not combustible. Use any media appropriate for surrounding fire.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH approved positive pressure self contained breathing apparatus and full protective clothing for all fires involving chemicals.

**Unusual Fire And Explosion Hazards:** None.

**Hazardous Combustion Products:** N/A

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| <b>SECTION 6: ACCIDENTAL RELEASE MEASURES</b> |
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Absorb with paper towels, vermiculite or other absorbent and scoop up. Place in a container for disposal.

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| <b>SECTION 7: HANDLING AND STORAGE</b> |
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**Work Practices:** Avoid contact with the eyes. Avoid prolonged contact with the skin and clothing.

**Special Precautions:** None

**Storage:** Store in a cool, dry place, away from incompatible substances. Keep container tightly closed to prevent contamination.

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| <b>SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</b> |
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| Chemical Name      | Exposure Limits  |
|--------------------|------------------|
| Potassium Chloride | None Established |
| Water              | None Established |

**Ventilation:** No special ventilation is required.

**Respiratory Protection:** None should be needed under normal use conditions. If the product is used in a manner to create a mist, use a NIOSH approved mist respirator.

**Gloves:** None normally needed.

**Eye Protection:** Safety glasses recommended.

**Other Protective Equipment:** None needed.

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| <b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b> |
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**Appearance And Odor:** Colorless, odorless liquid containing crystals of potassium chloride with no odor.

**pH:** Unknown

**Boiling Point:** Approximately 100°C (212°F)

**Melting Point:** Approximately -10°C (50°F)

**Solubility In Water:** 100%

**Octanol/Water Coefficient:** Not determined

**Specific Gravity:** 1.2

**Vapor Pressure:** 14 mmHg @ 20°C(water)

**Vapor Density:** 0.7 (water)

**Percent Volatile:** 85%

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| <b>SECTION 10: STABILITY AND REACTIVITY</b> |
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**Stability:** Stable

**Conditions To Avoid:** Excessive heat

**Incompatibility:** Violent reaction with trifluorobromide, sulfuric acid and potassium permanganate. Incompatible with water reactive substances.

**Hazardous Decomposition Products:** Thermal decomposition may produce hydrogen chloride, chlorine and potassium fumes.

**Hazardous Polymerization:** Will not occur.

**Conditions To Avoid:** N/A

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| <b>SECTION 11: TOXICOLOGICAL INFORMATION</b> |
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**Potential Health Effects:**

**Eye Contact:** Direct contact with solution may cause redness and irritation.

**Skin Contact:** Prolonged contact may cause mild irritation.

**Inhalation:** Inhalation of mist may cause mucous membrane irritation.

**Ingestion:** Large oral doses may cause nausea, vomiting, abdominal pain and weakness.

**Chronic Health Effects:** None known.

**Carcinogen Status:** None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA.

**Medical Conditions Aggravated By Exposure:** Persons with renal (kidney) impairment may be at increased risk from exposure.

**Acute Toxicity Data:** Potassium Chloride: LD50 oral rat: 2,600 mg/kg.

**Irritancy Data:** This product may cause eye, skin and respiratory irritation.

**Sensitization:** None of the components have been reported to cause sensitization in animals or humans.

**Reproductive Toxicity:** None of the components have been reported to cause reproductive toxicity in animals or humans.

**Teratogenicity:** None of the components have been reported to cause teratogenic effects in animals or humans.

**Mutagenicity:** Potassium chloride has been shown to cause mutagenicity in some tests systems.

**Synergistic Effects:** There are no chemicals known to cause any additive adverse health effects.

**SECTION 12: ECOLOGICAL INFORMATION**

The ecological effects of this product have not been evaluated.

**SECTION 13: DISPOSAL**

Dispose in accordance with all local, state, and federal regulations.

RCRA Hazardous Waste Codes: None

**SECTION 14: TRANSPORTATION DATA**

**DOT Shipping Name:** Not Regulated

**DOT Hazard Class:** N/A

**UN Number:** N/A

**DOT Labels Required (49CFR172.101):** N/A

**Hazardous Substance (49CFR172.101):** N/A

**Reportable Quantity:** N/A

**Emergency Response Guide Number:** N/A

**IATA Shipping Name:** Not Regulated

**IATA Hazard Class:** N/A

**UN Number:** N/A

**IATA Hazard Labels Required:** N/A

**SECTION 15: OTHER REGULATORY INFORMATION**

**U.S. FEDERAL REGULATIONS:**

**SARA 311/312:** Hazard Categories for SARA Section 311/312 Reporting: Acute health

**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313 (40 CFR 372): None

**CERCLA SECTION 103 Reportable Quantity:** Not applicable

**US Toxic Substances Control Act:** All of the components of this product are listed on the EPA TSCA Inventory.

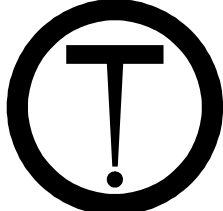
**STATE REGULATIONS:**

**California Proposition 65:** This product contains the following substances known to the State of California to cause Cancer and/or Reproductive Harm: None

**INTERNATIONAL REGULATIONS:**

**Australian Inventory of Chemical Substances:** All of the components in this product are listed on the AICS Inventory.

**Canadian WHMIS Classification:**

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|  | Class D-2-B (Toxic Material Causing Other Chronic Effects) |
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This product has been classified in accordance with the hazard criteria in the CPR and the MSDS contains all the information required by the CPR.

**European Inventory Of Commercial Chemical Substances:** All of the components of this product are listed on the EINECS Inventory.

**European Community Labeling:** Not a dangerous preparation

**Japanese Existing and New Chemical Substances:** All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

**Korean Existing Chemical Inventory:** All of the components in the product are listed on the KECL Inventory.

**SECTION 16: OTHER INFORMATION**

**NFPA HAZARD RATING:** HEALTH: 1 FIRE: 0 INSTABILITY: 0

**EU Classes and Risk Phrases for Reference (See Sections 2 and 3):**

Xi Irritant  
R36 Irritating to eyes

**Date of Latest MSDS Revision:** 04/07/00

**Revision Summary:** Updated Format, Revised Section 1, 2, 3, 8, 11, 15

The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Bacharach, Inc., it is the users obligation to assure safe use of this product.