SECTION I: GENERAL INFORMATION

PRODUCT NAME: Reference Fill Solution, 4M KCl & Saturated Ag, PHFS-A250 and electrodes with same fill solution

CHEMICAL NAME: Potassium Chloride/Triton X-100/Silver Chloride in Water

CHEMICAL FAMILY: salt solution

DOT SHIPPING INFO: none

IATA SHIPPING INFO: none

SECTION II: INGREDIENTS

<table>
<thead>
<tr>
<th>CAS NO.</th>
<th>%</th>
<th>CHEMICAL NAME(S)</th>
<th>LD50 (mg/kg)</th>
<th>OSHA/PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>7447-40-7</td>
<td>30%</td>
<td>Potassium Chloride</td>
<td>383</td>
<td>none</td>
</tr>
<tr>
<td>9036-19-5</td>
<td>0.01%</td>
<td>Triton X-100</td>
<td>4000</td>
<td>none</td>
</tr>
<tr>
<td>7783-90-6</td>
<td>0.001%</td>
<td>Silver Chloride</td>
<td>330</td>
<td>none</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>69.989%</td>
<td>Water</td>
<td>-</td>
<td>none</td>
</tr>
</tbody>
</table>

SECTION III: PHYSICAL DATA

BOILING POINT: 104°C

SPECIFIC GRAVITY: 1.1

VAPOR PRESSURE: N/A

FREEZING POINT: -4°C

VAPOR DENSITY: N/A

pH: 5.5-8

WATER SOLUBILITY: Soluble

APPEARANCE & ODOR: Clear, odorless solution

SECTION IV: FIRE & EXPLOSION HAZARD DATA

FLASHPOINT: Not flammable

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Water, CO₂, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES: N/A

UNUSUAL FIRE & EXPLOSION HAZARDS: N/A

SECTION V: HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: Itching of skin, irritation in an open wound. Irritation of eyes.
EMERGENCY & FIRST AID: Wash off contact area with water.
EYES & SKIN: Wash off contact area with water.
INGESTION/INHALATION: If exposed internally, consult physician.

SECTION VI: REACTIVITY DATA
STABLE: yes
CONDITIONS TO AVOID: N/A
INCOMPATIBILITY: None, suitable for any general storage.
HAZARDOUS DECOMPOSITION PRODUCTS: None
HAZARDOUS POLYMERIZATION: Will not occur

SECTION VII: SPILL OR LEAK PROCEDURES
STEPS TO BE TAKEN: Clean up and set aside for waste disposal.
WASTE DISPOSAL METHOD: Observe all federal, state, and local laws when disposing of this product.

SECTION VIII: SPECIAL PROTECTION INFORMATION
RESPIRATORY PROTECTION: N/A
VENTILATION: N/A
PROTECTIVE GLOVES: N/A
EYE PROTECTION: Safety goggles
OTHER PROTECTIVE EQUIPMENT: N/A

SECTION IX: SPECIAL PRECAUTIONS
PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: SARA Title III: The chemicals in this product do not appear on this listing.
OTHER PRECAUTIONS: NFPA Rating (0-4): Health-0, Fire-0, Reactivity-0, Specific-0.

ISSUE DATE: January 7, 2004
NAME: Peter Boyle/R & D Director
SIGNATURE: Peter F. Boyle