# Material Safety Data Sheet

**Identification of Substance:**
- **Product details:**
  - **Trade name:** Ampdirect® Plus
- **Manufacturer/Supplier:**
  - **Manufacturer's name:** SHIMADZU CORPORATION
  - **Division:** Analytical & Measuring Division
  - **Address:** 1, Nishinokyo-Kuwabaracho, Nakagyoku, Kyoto 604-8511, Japan
- **Emergency Tel:**
  - **Tel:** +81-075-823-1351, **Fax:** +81-075-823-1364
- **MSDS No.:** 241-08800-98

**Composition Information on Ingredients:**
- **Chemical characterization:**
  - Tris-HCl (≤ 5%)
  - KCl (≤ 5%)
  - MgCl₂ (≤ 5%)

**Hazards Identification:**
- **Hazard description:** Not applicable
- **After contact with eyes:** Rinse opened eyes for 15 minutes under running water. Then take medical treatment.
- **After contact with skin:** Immediately wash with water.
- **After inhalation:** Blow your nose and gargle immediately. Then move into fresh air and keep calm.
- **After ingestion:** Drink a large amount of water. Then take medical treatment.

**First Aid Measures:**
- **After ingestion:** Drink a large amount of water. Then take medical treatment.

**Fire Fighting Measures:**
- **Extinguishing agents:**
  - Water spray
  - Dry powder
  - Carbon Dioxide

**Accidental Release Measures:**
- **Measures for cleaning/collection:**
  - Gather and store in a vacant container as much as possible for reclamation or later disposal. Residue should be cleaned up by a mop.

**Handling and Storage:**
- **Handling:** Avoid contacting with eyes and skin.
- **Storage:** -20°C

**Exposure Controls and Personal Protection:**
- **Personal protection equipment:**
  - For eyes: Safety goggles
  - For hands: Appropriate gloves
  - For skin and body: Appropriate apron and jacket

**Physical and Chemical Properties:**
- **Form:** Liquid solution
- **Color:** Colorless
- **Boiling point:** 100°C
- **Melting point:** 0°C
- **Solubility in water:** Fully miscible
- **Vapor pressure:** Undetermined
- **Specific gravity:** Undetermined

**Stability and Reactivity:**
- **Flash point:** Not applicable
- **Ignition Temperature:** Not applicable
- **Ignitability:** None
- **Oxidation reactivity:** None
- **Self-reactivity, Explosion:** None
- **Dust explosion:** None

**Ecological Information:**
- **Fish toxicity:** Not tested
- **Degradative:** Not tested
- **Accumulative:** Not tested

**Toxicological Information:**
- **Carcinogenicity:** Not tested
- **Irritation (skin, eyes):** Not tested
- **Acute Toxicity:** Not tested
- **Subacute Toxicity:** Not tested
- **Chronic toxicity:** Not tested
- **Cancerous:** Not tested
- **Mutagenicity:** Not tested

**Disposal Considerations:** Dispose of with a large amount of water.

**Regulations:**
- **Japan:** None of the ingredients is listed

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* This information is based on our present knowledge and presented as reference information for safety use. Therefore, this shall not constitute a guarantee for any specific product features.

* This product may present unknown hazards and should be used with caution.