

# MATERIAL SAFETY DATA SHEET

Date Prepared: May, 2014  
Version No: 1

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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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Product Name: Advanced Electrode Cleaning Solution  
Product Codes: ECleanA-100, ECleanA-250  
Other Names: Nil  
Uses: Analytical Reagent

Supplier: Ionode Pty Ltd  
12 Walker Street, Tennyson Qld 4105

Contacts: Telephone: 61 07 38481660  
Fax: 61 07 38481428  
Emergency Phone: 61 07 38481660

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## 2. HAZARDS INFORMATION

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**Hazard classification:** Non Hazardous. Dangerous Goods.

**Risk phrases:**

Not considered a hazard according to the criteria of NOHSC.

**Safety phrases:**

Not considered a hazard according to the criteria of NOHSC.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

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**Ingredients :**

Chemical Entity	CAS No	Proportion
Hydrochloric acid	[7647-01-0]	low <1%
Pepsin	[9001-75-6]	low <10%
Water	[7732-18-5]	to 100%

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## 4. FIRST AID MEASURES

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Safety showers and eye wash facilities should be provided.

**Swallowed :**

If conscious wash out mouth with water. Seek medical advice. Show this MSDS to medical practitioner.

**Eye :**

Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this MSDS to medical practitioner.

**Skin :**

Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Show this MSDS to medical practitioner. Launder clothing before reuse.

**Inhaled :**

Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this MSDS to a doctor.

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## 5. FIRE FIGHTING MEASURES

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### Suitable Extinguishing Media:

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### Hazards From Combustion Products:

Hydrochloric acid and its solutions will not burn or support combustion. Contact with aluminium, zinc or tin may generate explosive hydrogen gas. Decomposition products include hydrogen chloride.

### Precautions For Fire Fighters and Special Protective Equipment:

Fire fighters and others who may be exposed to combustion products during fire should wear full protective clothing including positive pressure self-contained breathing apparatus (SCBA). Wear SCBA with full face-piece, operated in positive pressure mode when fighting fires.

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## 6. ACCIDENTAL RELEASE MEASURES

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### Emergency procedures:

Prevent from entering waterways. Restrict access to area. Ventilate area. Remove chemicals that can react with the spilled material.

### Methods and materials for containment and clean up:

Use inert material such as sand or earth to contain spill or leak. Absorb spills with chemical absorber or vermiculite and dispose of in accordance with local regulations.

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## 7. HANDLING AND STORAGE

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### Precautions for Safe Handling:

Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### Conditions for Safe Storage:

Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### National Exposure Standards:

SWA – Hydrogen chloride 7.5mg/m<sup>3</sup> TWA & Peak limitation

**Biological Limit Values:** No data available.

### Engineering Controls:

Not required with normal use. If mists are likely to be generated, maintain atmospheric concentrations well below exposure standards with extraction ventilation.

### Personal Protective Equipment (PPE):

The use of nitrile or neoprene gloves complying with AS 2161 and the use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance :</b>	Clear liquid
<b>Odour:</b>	Nil
<b>pH:</b>	1
<b>Boiling Point (°C) :</b>	Not applicable
<b>Freezing/melting Point:</b>	Not applicable
<b>Vapour Pressure (mm of Hg @ 25°C) :</b>	Not applicable
<b>Vapour Density:</b>	Not applicable
<b>Specific Gravity :</b>	1
<b>Flash Point (°C) :</b>	Not flammable
<b>Flammability Limits (%) :</b>	Not flammable
<b>Solubility in Water (g/L) :</b>	Soluble

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## 10. STABILITY AND REACTIVITY

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### Chemical stability:

Stable.

### Conditions to avoid:

Excessive heat.

### Incompatible materials:

Alkalis, organic materials, sulphites, cyanides, aluminium, phosphorus, tin and zinc

### Hazardous decomposition products:

Refer to section 5 (Fire Fighting Measures).

### Hazardous reactions:

Hazardous polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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### Health Effects:

**Swallowed** : May be irritating to tissue. Ingestion may cause vomiting, diarrhea. For hydrogen chloride LD50 oral – rat 900mg/kg.

**Eye** : Irritating to eye tissue. For hydrochloric acid 100mg produced mild irritation of rabbit eyes.

**Skin** : May be irritating to skin tissue.

**Inhaled** : May be irritating to respiratory tissue. For hydrogen chloride LCLo human 1300ppm for 30 minutes, 3000 ppm for 5 minutes

**Chronic Effects**: No data available.

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicity:

No data available.

### Persistence and degradability:

No data available.

### Mobility:

No data available.

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## 13. DISPOSAL CONSIDERATIONS

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Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state and local environmental regulations.

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## 14. TRANSPORT INFORMATION

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**UN Number:** 3264

**UN Proper Shipping Name:** Corrosive liquid acidic inorganic N.O.S. (contains hydrochloric acid <1%)

**Class and subsidiary risk(s):** 8

**Packing Group:** 111

**Hazchem Code:** 2R

**Special precautions for user** : Nil

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**15. REGULATORY INFORMATION**

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**Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP):**

Nil

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**16. OTHER INFORMATION**

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