

HMIS RATINGS:  
 Health : 3  
 Flammability : 1  
 Reactivity : 1  
 Personal Protection: G

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: EC- ELECTRONIC CLEANER	Emergency Telephone Number: (416)910-3087
Chemical Family : Monoethanolamine Solution	Date Prepared Jan 4 <sup>th</sup> , 2011
Company Identification: CRYSTAL ELECTRONICS INC.	MFGD. BY: TIDOL CORP.
2-1251 Gorham St	120-2A McLevin Ave
Newmarket, ON L3Y 8Y6	Scarborough, ON M1B 3E9
905 953-9129	416 293-2244

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

CAS NUMBER	CHEMICAL NAME	% BY WGHT.	OSHA PEL/ ACGIH TLV	SARA 302/304(1)*	SARA 313 (2)*	STATE INFO(3)(4)
110-91-8	Morpholine	< 8.0	20 ppm / 20 ppm	NO	NO	NO
141-43-5	Monoethanolamine	< 73.0	3 ppm / 3 ppm	NO	NO	NO

\* See Section 15 for more information n/e = none established - n/a = not applicable

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER. Corrosive. Harmful if inhaled or absorbed through skin. Causes eye and skin burns. Harmful and corrosive if swallowed.

Primary Route of Entry: Eye contact, skin contact/absorption, inhalation  
 Acute/Potential Health Effects

EYES: Causes severe irritation experienced as discomfort or pain, excess blinking and tear production, with redness and swelling of the conjunctiva.

SKIN: Brief contact may cause slight irritation. Prolonged contact may cause more severe irritation with pain, local redness and swelling and possible tissue destruction.

INHALATION: High concentrations of vapor or mists may cause irritation of the respiratory tract. Prolonged exposure may cause injury to the respiratory tract.

INGESTION: Harmful if swallowed. Causes severe irritation or chemical burns of the mouth, throat, esophagus and stomach.

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**Section 3: HAZARDS IDENTIFICATION - continued:**

Chronic / Long Term Effects: Repeated overexposure may cause damage to kidneys and liver.

**Signs and Symptoms of Overexposure:**

Dermal exposure may cause local redness and swelling, pain and discomfort.  
Prolonged skin contact may result in absorption of harmful amounts.  
Inhalation may aggravate asthma and inflammatory or fibrotic pulmonary disease.

**Target Organ Effects:**

Liver, kidney

**Reproductive/Developmental Information:**

No data.

**Carcinogenic Information:**

This material is not listed as a carcinogen by IARC, NTP or OSHA.

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**Section 4: FIRST AID MEASURES**

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**SKIN:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**INGESTION:** Seek medical attention immediately. Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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**Section 5: FIRE FIGHTING MEASURES**

Flash Point: 205 degrees F (TCC Method)

Extinguishing Media: Dry chemical, CO<sub>2</sub>, foam or water spray is recommended.

Special Fire Fighting Instructions: Wear a self contained breathing apparatus with a full face piece operated in the positive pressure demand mode. Chemical resistant PPE is recommended.

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**Section 6: ACCIDENTAL RELEASE MEASURES**

Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Absorb spill with inert material (e.g. dry sand, earth). Prevent runoff from entering drain, sewers, streams or other bodies of water. Absorb unrecoverable product. Transfer contaminated absorbant, soil and other materials to containers for disposal.

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**Section 7: HANDLING AND STORAGE**

Follow all MSDS/label precautions even after container is emptied because they may contain product residues. Use with adequate ventilation. Do not get in eyes, on skin or clothing. Store in a cool, dry place. Keep container closed when not in use. Keep out of reach of children.

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**Section 8: EXPOSURE CONTROLS and PERSONAL PROTECTION**

Eye Protection: Wear safety glasses or goggles.



ACUTE (X) Chronic (X) Fire ( ) Pressure ( ) Reactive ( ) Not Applicable ( )  
(1) Title III Section 302/304 Extremely Hazardous Substances - 40 CFR 355 Appendix A  
(2) Title III Section 313 Toxic Chemicals - 40 CFR 372.65  
If indicated under Section 2 of this MSDS, this product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right to Know Act of 1986. This information must be included in all MSDS that are copied and distributed for this material.

RCRA Status: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If this product becomes a hazardous waste it would be assigned RCRA Code(s)  
D002

State and Local Regulations: Certain states maintain their own ingredient lists which differ slightly from the Federal standards. If indicated under Section 2 of this MSDS, states listed below may have regulations on ingredients contained in this product. Check with your state for any additional regulations.

- (3) California proposition 65 (Safe Drinking Water & Toxic Enforcement Act of 1986)
- (4) Massachusetts (Hazardous Substance Disclosure by Employers)

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Section 16: OTHER INFORMATION

This information was compiled from current manufacturer's MSDS's of the component parts of the product.

Disclaimer: The Manufacturer believes that the information contained in the Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

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