

IDENTITY (As used on Label and List)

**CHEM-CREST 211**

Uses: Ultrasonic liquid detergent concentrate used for the removal of oils, greases, carbon residues, various oxides, particulate matter, and various other contaminants from steels, ceramics, glasses, and other compatible materials. Contact a Crest Ultrasonics chemical specialist for process specific recommendations

**Section I – Product and Company Identification**

Supplier:  
CREST ULTRASONICS CORPORATION  
18 GRAPHICS DRIVE  
EWING, NJ 0862 8, UNITED STATES OF AMERICA  
[www.crest-ultrasonics.com](http://www.crest-ultrasonics.com)

Emergency Telephone Number  
(800) 424-9300 (USA Chemtrec) or (703) 527-3887 (Int'l Chemtrec)  
Telephone Number for Information  
(609) 883-4000

Last update: 21 February 2014

**Section II – Hazards Identification****Appearance** - Light yellow to dark amber detergent liquid, surfactant odor**GHS Classification:**

Acute toxicity, Oral (Category 5)

Skin irritation (Category 2)

Eye irritation (Category 2A)

**Pictogram:****HMIS Classification:** Health: 2 Fire: 0 Physical: 0**NFPA Rating:** Health: 2 Fire: 0 Reactivity: 0**Signal Word:** Warning**Hazard Statements:**

H302: Harmful if swallowed

H402: Harmful to aquatic life (acute)

**Precautionary statements:**

P280: Wear protective gloves / protective clothing / eye protection / face protection

P305 + P351 + P338: If eyes are exposed: Rinse continuously with water for 15 minutes minimum, ensuring to remove contact lenses if present and easy to do.

P310: Call poison control center and/or doctor/healthcare professional immediately

**Recommended Personal Protective Equipment:**

PVC-lined, neoprene, nitrile rubber, or polyethylene gloves, chemical splash goggles, and use good handling practices. Wear face guard and chemical apron when appropriate, as well as long pants and boots. Avoid splashing and spilling. Eye wash should be available in area. Wash hands before handling food after using any chemical.

**Section III – Composition / Information on Ingredients**

COMPONENTS: #	% ACTIVE	OSHA PEL	EC #	C.A.S.
PROPRIETARY SURFACTANTS	17-20%	N/A	-	-
SODIUM METASILICATE	7-11%	2 mg/m <sup>3</sup> (inhalation)	229-912-9	6834-92-0
TRIETHANOLAMINE	3-5%	5 mg/m <sup>3</sup> (ACGIH TWA)	203-049-8	102-71-6
2-METHYL-2, 4-PENTANEDIOL	1-3%	121 mg/m <sup>3</sup> (ACGIH TWA)	203-489-0	107-41-5
ETHYLENE DIAMINE TETRACETIC ACID	0.1-2%	N/A	200-449-4	60-00-4
2-AMINOETHANOL	1-2%	3 mg/m <sup>3</sup> (inhalation)	205-483-3	141-43-5
PROPRIETARY INGREDIENTS, INERT	BALANCE	N/A	231-791-2	102-71-6

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## **Section IV – First Aid Measures**

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### General Advice:

Consult a physician if necessary. Move out of dangerous area. Present a copy of this MSDS to the physician in attendance.

### Contact with eyes:

Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get immediate medical attention. If immediate medical attention is not available, keep flushing with water.

### If swallowed:

If breathing, give two glasses of water. Induce vomiting. See a physician.

### If inhaled:

Move person to fresh air. If breathing difficult, give oxygen. If not breathing, give artificial respiration. Consult a physician immediately.

### Skin contact:

Wash off with plenty of soap and water.

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## **Section V – Fire-fighting Measures**

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### Suitable extinguishing media:

Water spray, alcohol-resistant foam, dry chemical, carbon dioxide

### Protective equipment for fire-fighters:

Use self-contained breathing apparatus (SCBA) when necessary

### Unusual Fire and Explosion Hazards

Use water spray to cool unopened containers if necessary.

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## **Section VI – Accidental Release Measures**

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### In case of a leak or spill:

Completely isolate the area of the leak or spill. Remove all non-necessary personnel from the area. Dyke the spilled material with sand, earth, or absorbent material. Soak up or suction material to drums, following all recommendations in Section VIII – Personal Protective Equipment of this MSDS. If possible, avoid draining to sewage and waterways. Material is very slippery. Wear full protective gear. Flush affected area after soak up with plenty of water. Neutralize all contained solutions to pH 7.

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## **Section VII – Handling and Storage**

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### Handling of material:

Avoid contact with eyes, skin, clothing, and other exposed areas of the body. Avoid inhalation of vapor or mist. Use standard measures for fire-fighting purposes. Eye wash should be available in area where product is used. Ensure use of proper personal protective equipment when handling any chemical.

### Storage of material:

Keep material in container, tightly closed, in a dry environment. Do not allow to freeze. Follow all appropriate grounding and bonding procedures during use of any chemical. Follow all appropriate lockout / tagout procedures in all areas. Do not allow access of unauthorized personnel to chemical storage areas. Observe all local, state, and federal regulations. Material may be repackaged in steel or polycontainers.

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## **Section VIII – Exposure controls / Personal Protective Equipment**

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### Engineering Controls:

In areas where deemed necessary, investigate all engineering controls and techniques in order to reduce risk of exposure to any chemical. Provide necessary ventilation. If necessary, use local exhaust ventilation at sources of air contamination. Consult ACGIH ventilation manual or NFPA Standard 91 for exhaust system designs.

### Face and Eye Protection:

The use of chemical splash / safety goggles is highly recommended, along with accessibility to eye wash stations. If necessary, provide workers with chemical full-face shields. Any long hair should be firmly held behind or on top of the head to avoid exposure.

### Skin Protection:

The use of chemically-resistant clothing and PVC-lined, latex, or Nitrile gloves is highly recommended for use with this product. Consult with glove manufacturers for a list of gloves acceptable for use with any chemical. If necessary, wear full-face shield and rubber aprons with use of chemicals. Wash all clothing that has been exposed to chemicals before reuse.

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**Section VIII – Exposure controls / Personal Protective Equipment (con't)**

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**Respiratory Protection:**

Avoid inhalation of vapor from product. When exposure limits in a given area exceed set values, use NIOSH approved respiratory protection. Consult with respiratory protection equipment manufacturer for types of equipment suitable for each chemical. Respiratory protection must comply with 29 CFR 1910.134. When emergency conditions are presented, evacuate areas affected and use appropriate safety measures for respiratory protection such as, but not limited to, self-contained breathing apparatus, air-line respirator, full-face respirator, or other approved methods for each given chemical.

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**Section IX – Physical and Chemical Properties**

Appearance / Odor	light yellow to dark amber liquid detergent, surfactant odor
pH (5%)	11.4 ± 0.5
Specific Gravity	1.08 ± 0.05
Vapor Pressure	N/E
Vapor Density	>1
Freezing Point	<32°F/0°C
Boiling Point:	>212°F / 100°C
Solubility in Water	complete
Flash Point	None
Evaporation Rate (butyl acetate = 1)	N/E

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**Section X – Stability and Reactivity**

<i>Stability</i>	Unstable		
	Stable	X	This chemical is stable under anticipated normal operating conditions

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Incompatibility (Materials to Avoid): None known

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Hazardous Decomposition or Byproducts: None known

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<i>Hazardous Polymerization</i>	May Occur		
	Will Not Occur	X	This chemical will not undergo hazardous polymerization under anticipated normal operating conditions

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**Section XI – Toxicological Information**

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No data available

**Section XII – Ecological Information**

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No data available

**Section XIII – Waste Disposal**

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Always dispose of all chemicals via State, Local, and Federal Regulations.

*Any processing done with the use of this chemical in which any substances are added to this material may make this waste management information inaccurate. Local laws must always be consulted when considering waste disposal.*

**Section XIV – Transportation Information**

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US Department of Transportation (DOT), ICAO/IATA/IMDG

Non-hazardous, Not regulated

Harmonization / Tariff Code:

3402905030

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**Section XV – Regulatory Information**

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OSHA Hazard Communication Standard

This product contains "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (acute) Health Hazard – Yes

Delayed (chronic) Health Hazard – Yes

Fire Hazard – No

Reactive Hazard – No

SARA Title III, section 313

No chemicals contained in this product are subject to regulation under SARA Title III, section 313.

TSCA Section 8(b)

All of the components of this product are listed on the TSCA Inventory

CERCLA Reportable Quantities

N/E

New Jersey, Pennsylvania, and Massachusetts Right to Know Act Listed Components

Sodium Metasilicate, CAS# 6834-92-0

Triethanolamine, CAS# 102-71-6

2-Methyl-2,4-pentanediol, CAS# 107-41-5

Ethylene Diamine Tetraacetic Acid, CAS# 60-00-4

2-Aminoethanol, CAS# 141-43-5

Water, CAS# 102-71-6

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**Section XVI: Other Information**

Chem Crest Chemical MSDS are available on via website, <http://www.crest-ultrasonics.com>

MSDS Prepared by: Charles P. Kaczorek, Technology Department Manager

Date of preparation: 21 February 2014

Legend:

N/A – Not Applicable

N/E – Not Established

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