IDENTITY (As used on Label and List)

CHEM-CREST 235

Section I – Product and Company Identification

Supplier:
CREST ULTRASONICS CORPORATION
SCOTCH ROAD, TRENTON MERCER AIRPORT
TRENTON, NJ 08628, UNITED STATES OF AMERICA
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: 07 March 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: None

HMIS Classification: Health: 1 Fire: 0 Physical: 0
NFPA Rating: Health: 1 Fire: 0 Reactivity: 0
Signal Word: None

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

<table>
<thead>
<tr>
<th>COMPONENTS:</th>
<th>% ACTIVE</th>
<th>OSHA PEL</th>
<th>EC #</th>
<th>C.A.S. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM METASILICATE</td>
<td>7-11%</td>
<td>2 mg/m3 (inhalation)</td>
<td>229-912-9</td>
<td>6834-92-0</td>
</tr>
<tr>
<td>PROPRIETARY SURFACTANTS</td>
<td>25-30%</td>
<td>N/A</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PROPRIETARY INGREDIENTS, INERT</td>
<td>BALANCE</td>
<td>N/A</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Section IV – First Aid Measures

General Advice:
Consult a physician if necessary. Move out of dangerous area. Present a copy of this MSDS to the physician in attendance.
Section IV – First Aid Measures (con’t)

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. Do not 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.

Section V – Fire-fighting Measures

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.

Section VI – Accidental Release Measures

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.

Section VII – Handling and Storage

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 poly containers.

Section VIII – Exposure controls / Personal Protective Equipment

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.
Section VIII – Exposure controls / Personal Protective Equipment (con’t)

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.

Section IX – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance / Odor</td>
<td>light yellow to dark amber liquid detergent, surfactant odor</td>
</tr>
<tr>
<td>pH (5%)</td>
<td>11.4 ± 0.2</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.04 ± 0.05</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/E</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>&lt;32°F/0°C</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>&gt;212°F / 100°C</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>complete</td>
</tr>
<tr>
<td>Flash Point</td>
<td>None</td>
</tr>
<tr>
<td>Evaporation Rate (butyl acetate = 1)</td>
<td>N/E</td>
</tr>
</tbody>
</table>

Section X – Stability and Reactivity

<table>
<thead>
<tr>
<th>Stability</th>
<th>Unstable</th>
<th>Stable</th>
<th>X</th>
<th>This chemical is stable under anticipated normal operating conditions</th>
</tr>
</thead>
</table>

Incompatibility (Materials to Avoid): None known

Hazardous Decomposition or Byproducts: None known

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

Section XI – Toxicological Information

No data available

Section XII – Ecological Information

No data available

Section XIII – Waste Disposal

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

US Department of Transportation (DOT), ICAO/IATA/IMDG
Non-hazardous, Not regulated

Harmonization / Tariff Code:
3402905030
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
None of the chemicals contained in this product are not 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
Water, CAS# 102-71-6

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: 07 March 2014

Legend:
N/A – Not Applicable
N/E – Not Established

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED, RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT AND APPLICABLE TO THEIR CIRCUMSTANCES. CREST CHEMICALS SHOULD ONLY BE HANDLED BY APPROPRIATE PERSONNEL. CREST ULTRASONICS HOLDS NO WARRANTY, EXPRESS OR IMPLIED, RESULTING FROM THE MISUSE OF CHEMICALS. ALL USERS OF THIS CHEMICAL SHOULD BE PROVIDED WITH A COPY OF THIS MSDS ALONG WITH ADEQUATE TIME TO REVIEW IT PRIOR TO USE OF THE CHEMICAL.
CHEM-CREST 400-L

IDENTITY (As used on Label and List)

Note: Synthetic formulation designed specifically for the lubrication of precision parts, including but not limited to firearms, weapons, chain drives, bearings, and other precision metal parts.

Section I – Product and Company Identification

Supplier: CREST ULTRASONICS CORPORATION
SCOTCH ROAD, TRENTON MERCER AIRPORT
TRENTON, NJ 08628, UNITED STATES OF AMERICA
www.crest-ultrasonics.com

Emergency Telephone Number
(800) 424-9300 (Chemtrec) or (703) 527-3887 outside the US
Telephone Number for Information
(609) 883-4000

Last update: 02 April 2014

Section II – Hazards Identification

Appearance – Pale yellow to amber viscous liquid, aromatic odor

GHS Classification:
Aspiration hazard (Category 1)
Acute toxicity, oral (Category 5)
Acute aquatic toxicity (Category 2)
Eye irritation (Category 2A)
Skin irritation (Category 3)

Pictogram:

HMIS Classification: Health: 1 Fire: 1 Physical: 0
NFPA Rating: Health: 1 Fire: 1 Reactivity: 0

Signal Word: Warning

Hazard Statements:
H303: May be harmful if swallowed
H402: Harmful to aquatic life

Precautionary statements:
P301 + P310: If swallowed: Immediately call a Poison Control Center or doctor/physician
P331: Do not induce vomiting
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.

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

<table>
<thead>
<tr>
<th>COMPONENTS:</th>
<th>% ACTIVE</th>
<th>OSHA PEL</th>
<th>EC#</th>
<th>C.A.S. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARRAFFINIC HYDROCARBON, PROPRIETARY MIX</td>
<td>90-97%</td>
<td>240 mg/m³ (NIOSH 8-hr TWA)</td>
<td>PROPERTIARY BLEND</td>
<td></td>
</tr>
<tr>
<td>NONYLPHENOXY POLY(ETHYLENEOXY)ETHANOL</td>
<td>2-3%</td>
<td>N/A</td>
<td>500-209-1</td>
<td>68412-54-4</td>
</tr>
<tr>
<td>POLYDIMETHYLSILOXANE</td>
<td>1-2%</td>
<td>N/A</td>
<td>N/E</td>
<td>63148-62-9</td>
</tr>
</tbody>
</table>
Section IV – First Aid Measures

General Advice:
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Never give anything to an unconscious person.

Contact with eyes:
Flush with water for at least 15 minutes, lifting upper and lower lids occasionally. See a physician if irritation persists.

If swallowed:
Give 2-3 glasses of fresh water or milk. Do NOT induce vomiting. See a physician.

If inhaled:
Remove to fresh air. Give oxygen if necessary. No specific treatment should be necessary.

Skin contact:
Wash off with plenty of soap and water. Launder all contaminated clothing before reuse.

Section V – Fire-fighting Measures

Suitable extinguishing media:
Alcohol-resistant foam, dry chemical, carbon dioxide.

Protective equipment for fire-fighters:
Must use self-contained breathing apparatus (SCBA), eye protection. Vapors are heavier than air, and can travel considerable distances, and flash back. Vapor-air mixtures are explosive.

Flash Point:
95.6ºC / 204ºF

Section VI – Accidental Release Measures

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 all draining to sewage and waterways. Material is slippery. Do not discharge into water ways or sewer system.

Section VII – Handling and Storage

Handling of material:
Avoid contact with eyes, skin, clothing, and other exposed areas of the body. Avoid inhalation of vapor or mist. Use SCBA fire-fighting purposes. Eye wash and safety shower 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 / tag out 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, poly, or aluminum containers. Material should be kept over secondary containment in case of spill as material is slippery, and should not be discharged to water ways or sewer system. Storage temperature 15-49ºC.

Section VIII – Exposure controls / Personal Protective Equipment

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 and safety showers. If necessary, provide workers with chemical full-face shields and/or SCBA. 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. Launder all clothing that has been exposed to chemicals before reuse.

Respiratory Protection:
Avoid inhalation of vapor from product. When exposure limits in a given area exceed set values, use NIOSH approved
Section VIII – Exposure controls / Personal Protective Equipment (con’t)

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.

Hygiene Measures:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday, and after use of chemicals before any other activity.

Section IX – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance / Odor</td>
<td>Pale yellow to amber clear, viscous liquid, aromatic</td>
</tr>
<tr>
<td>pH (100%)</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.85 ± 0.10</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/E</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>3.4</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>&lt;32°F</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;300°F</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>complete</td>
</tr>
<tr>
<td>Flash Point</td>
<td>204-208°F (concentrate, closed cup)</td>
</tr>
<tr>
<td>Evaporation Rate (butyl acetate = 1)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section X – Stability and Reactivity

<table>
<thead>
<tr>
<th>Stability</th>
<th>Unstable</th>
<th>Stable</th>
<th>X This chemical should be stable under normal operating use conditions</th>
</tr>
</thead>
</table>

Incompatibility (Materials to Avoid): Ignition sources, strong acids, strong oxidizing agents at high temperatures

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide

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

Section XI – Toxicological Information

Acute Toxicity:
No data available

Carcinogenicity:
No component of this product at levels of greater than 0.1% is identified as a human carcinogen by IARC, ACGIH, NTP, or OSHA.

Teratogenicity:
No data available

Specific Target Organ Toxicity – single or repeated exposure (GHS)
No data available

Section XII – Ecological Information

No data available. Material is acutely toxic to aquatic life, and should not be discharged to sewer.
Section XIII – Waste Disposal

Incinerate, or bury as solid after absorption on cementation in a licensed facility. Do not discharge into water ways of sewer system. Always dispose of all chemicals via State, Local, and Federal Regulations. D001. This product is not believed to be biodegradable.

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

US Department of Transportation (DOT)
(non-bulk)
Non-hazardous, not regulated

(bulk - >115 gallons in single container)
Combustible liquid, N.O.S. (Contains petroleum naphta), 3, NA1255, Guide # 128

ICAO/IATA
Non-hazardous, not regulated

IMDG
Non-hazardous, not regulated

Harmonization Code
3403990000

Section XV – Regulatory Information

OSHA Hazard Communication Standard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Fire hazard, acute health hazard (eyes)

SARA Title III, section 313
No chemical contained in this product above de minimus concentrations 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
None at quantities of <1,000,000 gallons.

New Jersey, Pennsylvania, and Massachusetts Right to Know Act Listed Components
Hydrocarbon, CAS# 64742-43-4
Hydrocarbon, CAS# 64742-47-8
Hydrocarbon, CAS# 64742-58-1
Hydrocarbon, CAS# 8042-47-5
Polydimethylsiloxane, CAS# 63148-62-9
Nonylphenoxy poly(ethylenoxy)ethanol, 68412-54-4

Section XVI: Other Information
Chem Crest Chemical MSDS are available on via website, http://www.crest-ultrasonics.com
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