IDENTITY(As used on Label and List)

CHEM-CREST 121

Section I – Product and Company Identification

Uses: Ultrasonic liquid semi-aqueous concentrate used for the removal of waxes, pitch, varnish, paint, and various other contaminants from steels, ceramics, glasses, and other compatible materials. Contact a Crest Ultrasonics chemical specialist for process specific recommendations

Section 1 – Product and Company identification		
Supplier: CREST ULTRASONICS CORPORATION 18 GRAPHICS DRIVE EWING, NJ 08628, UNITED STATES OF AMERICA	Emergency Telephone Number (800) 424-9300 (USA Chemtrec) or (703) 527-3887 (Int'I Chemtrec) Telephone Number for Information (609) 883-4000	
www.crest-ultrasonics.com	Last update: 03 November 2017	

Section II – Hazards Identification

Appearance - Clear yellow to pale tan liquid, mild amine odor

GHS Classification:

Skin irritation (Category 2) Eye irritation (Category 2A) Reproductive toxicity (Category 1B) Specific target organ toxicity - single exposure (Category 3) Respiratory System

HMIS Classification: Health: 2 Fire: 2 Physical: 0 NFPA Rating: Health: 2 Fire: 2 Reactivity: 0

Hazard Statements:

- H227: Combustible Liquid
- H315: Causes skin irritation
- H319: Causes serious eve irritation
- H335: May cause respiratory irritation
- H360: May damage fertility of the unborn child

Precautionary statements:

P202: Do not handle until all safety precautions have been read and understood

- P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P261: Avoid breathing gas / mist / vapors / spray.
- P264: Wash skin thoroughly after handling.
- P271: Use only in a well-ventilated area.

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

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P370 + P378: In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinguishing.

P501: Dispose of contents / container to an approved waste disposal plant.

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.

Signal Word: Danger



SAFETY DATA SHEET

Section III – Composition / Information on Ingredients

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COMPONENTS:	% ACTIVE	OSHA PEL	EC #	C.A.S. #
N-methyl-2-pyrrolidone	90-95%	10 ppm (WEEL TWA)	212-828-1	872-50-4
Water	1-5%	NONE	231-791-2	7732-18-5
Proprietary non-ionic surfactant	1-5%	N/E	TRADE SECRET	

Section IV – First Aid Measures

General Advice:

Seek medical attention if necessary. Present a copy of this SDS 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. Seek medical attention if necessary.

If swallowed:

Do not induce vomiting. Dilute by giving water. Seek medical attention if necessary. Never give anything to an unconscious person.

If inhaled:

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

Skin contact:

Wash hands and any contaminated clothing before reuse.

Section V – Fire-fighting Measures

Suitable extinguishing media:

Treat as oil fire - 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.

Unusual Fire and Explosion Hazards

Decomposes at extremely high temperatures to oxides of carbon and nitrogen.

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 SDS. If possible, avoid draining to sewage and waterways. Material is very slippery. Wear full protective gear. 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 standard measures for oil fires 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 containers only.

Section VIII – Exposure controls / Personal Protective Equipment

Engineering Controls:

Should not be necessary under standard use conditions. 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.

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

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.

Respiratory Protection

Should not be necessary under standard use conditions. In cases where deemed necessary, 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.

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

Appearance / Odor	Clear yellow to pale tan liquid, mild amine odor
pH (100%)	11.45 ± 0.5
Specific Gravity	1.04 ± 0.02
Vapor Pressure	N/E
Vapor Density	3.4
Melting Point	N/E
Freezing Point	<32°F/0°C
Boiling Point:	>300°F/350°C
Solubility in Water	Insoluble
Flash Point	204°F/ 95.6°C (P-MCC)
Expansion Rate (butyl acetate = 1)	N/A

Section X – Stability and Reactivity Stability Unstable Image: Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3">Colspan="3"Colspan="3">Colspan="3"

Hazardous Decomposition or Byproducts: Oxides of carbon and nitrogen may form under high temperatures

Hazardous	May Occur		
Polymerization	Will Not Occur	х	This chemical will not undergo hazardous polymerization under anticipated normal operating conditions

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:

Damage to fetus possible; no data available

Section XI – Toxicological Information (con't)

Specific Target Organ Toxicity - single or repeated exposure (GHS)

Inhalation – May cause repiratory irritation

Other data:

This product contains N-methyl-2-pyrrolidone, RTECS# UY5790000, which can act as a carrier into the body for other compounds, and can cause nausea, vomiting, diarrhea, and other symptoms upon exposure. This material is a known respiratory irritant, and can cause numerous abnormalities in lymphoid tissues of the thymus, spleen, and lymph nodes, as well as irregularities in skeletal development in infants, and bone marrow in infants and adults.

Section XII – Ecological Information

No data available

Section XIII – Waste Disposal

Always dispose of all chemicals via State, Local, and Federal Regulations. Material is combustible, and can be burned in a chemical incinerator equipped with air scrubber and afterburner. Used and unused material should be taken off-site by a licensed waste disposal company. Packaging should be treated as unused product.

Section XIV – Transportation Information

<u>US Department of Transportation (DOT) – Combination packaging under 5L per inner container (49CFR173.150)</u> Non-hazardous, not regulated

<u>US DOT – All other packaging</u> Combustible liquid, NOS (Contains N-Methyl-2-Pyrrolidone), NA1993, Class CBL, PG III Reportable Quantity: N/A Marine Polutant: No Poison inhalation hazard: No

ICAO/IATA, IMDG Not regulated

Harmonization / Tariff Code: 3402905030

Section XV – Regulatory Information

OSHA Hazard Communication Standard None listed

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 – No Delayed (chronic) Health Hazard – No Fire Hazard – No Reactive Hazard – No

SARA Title III, section 313 No chemicals contained in this product are not subject to regulation under SARA Title III, section 313.

<u>TSCA Section 8(b)</u> All of the components of this product are listed on the TSCA Inventory

CERCLA Reportable Quantities N/E

Section XV – Regulatory Information (con't)

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

N-Methyl-2-Pyrrolidone, CAS# 872-50-4

California Prop. 65 Components:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. N-Methyl-2-Pyrrolidone, CAS# 872-50-4

Section XVI: Other Information

Chem Crest Chemical SDS are available on via website, <u>http://www.crest-ultrasonics.com</u> SDS Prepared by: Sean M. Joyce, Applications Lab Manager Date of preparation: 03 November 2017

Legend:

N/A - Not Applicable

N/E - Not Established

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