MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ULTRASONIC CLEANER

SYNONYMS: NONE PRODUCT CODES: DX182

MANUFACTURED FOR: YI Ventures, LLC dba Health Sonics Corporation

EMERGENCY PHONE: (800) 342-3096

CHEMTREC PHONE: N/A
OTHER CALLS: N/A

CHEMICAL NAME: PROPRIETARY

CHEMICAL FAMILY: AQUEOUS SURFACTANT MIXTURE

CHEMICAL FORMULA: MIXTURE

REVISION DATE: April 26, 2006

PRODUCT USE: ULTRASONIC CLEANING SOLUTION FOR PRODUCT INFORMATION AND INQUIRIES:

Customer Service Health Sonics Corporation (800) 342-3096

FOR MEDICAL EMERGENCIES ONLY:

Libby Laboratories (510) 527-5400

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:

The identities of the ingredients in this product are proprietary and regarded as a TRADE SECRET as defined in 29 CFR 1910.1200. In the case of a medical emergency, the identities will be divulged to qualified health professionals according to the provisions of 29 CFR 1910.1200 regarding a TRADE SECRET.

This product is a weak organic base in a water system. It contains ionic and nonionic surfactants.

This product is classified as hazardous for the purposes of the OSHA Hazardous Communication standard as defined in 29 CFR 1910.1200.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Clear liquid with a slight ammonia odor. Alkaline pH = \sim 10. Severe eye irritant. May cause eye damage. Flush eyes for 30 minutes and seek medical attention.

ROUTES OF ENTRY: eye contact

POTENTIAL HEALTH EFFECTS

EYES: This product is a weak base (pH-~10). Direct contact may cause severe irritation and/or burns. Corneal damage is possible and could result in permanent impairment of vision. Concentrated vapors of the undiluted product may irritate the eyes in sensitive individuals.

SKIN: Overexposure may cause skin irritation.

INGESTION: Can cause G.I. irritation or ulceration. Ingestion of large quantities can cause muscle paralysis affecting the ability to breathe. May be fatal if ingested.

INHALATION: Excessive inhalation may cause irritation

ACUTE HEALTH HAZARDS: Possible eye damage.

CHRONIC HEALTH HAZARDS: See section 11

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known

CARCINOGENICITY

OSHA: no ACGIH: no NTP: no IARC: no

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The attached MSDS has been verified 2012-08 by Henry Schein Canada Inc. Regulatory Affairs to be the most current version of the MSDS for this product. The MSDS will be verified again on 2015-04.

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OTHER:

SECTION 4: FIRST AID MEASURES

EYES: Immediate and continuous irrigation with flowing water for at least 30 minutes. Remove contact lenses if present. Occasionally lift upper and lower eyelids during irrigation. Medical consultation is mandatory.

SKIN: Flush skin with large amounts of water. Remove contaminated clothing. Use mild soap to wash the affected area. Contact a physician if irritation persists.

INGESTION: Do not induce vomiting. Give milk to drink, but do not give any liquid by mouth to an unconscious person. Seek medical attention.

INHALATION: Remove to fresh air. If irritation persists, get medical attention. In extreme cases, give supplemental oxygen.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: May cause tissue destruction leading to stricture. If lavage is performed, suggest use of an endotrachial and/or esophageal control. There is no specific antidote. Supportive care and treatment must be based on the judgment of the physician in response to the symptoms and reactions of the patient.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER:

(% BY VOLUME) not established LOWER: not established

FLASH POINT: >215 degrees F

AUTOIGNITION TEMPERATURE: not established

HAZARD CLASSIFICATION SYSTEM

Based on a review of the undiluted components:

HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 0

OTHER: NONE

EXTINGUISHING MEDIA: NO SPECIAL CONSIDERATIONS

SPECIAL FIRE FIGHTING PROCEDURES: NO SPECIAL CONSIDERATIONS

UNUSUAL FIRE AND EXPLOSION HAZARDS: NO SPECIAL CONSIDERATIONS

HAZARDOUS DECOMPOSITION PRODUCTS: During a fire, smoke may contain the original materials in addition to unidentified toxic and/or irritating compounds. These may include, but are not limited to, nitrogen oxides, carbon monoxide, and carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: This product is toxic to fish. Take measures to keep the undiluted product from entering sewer systems or bodies of water. Absorbents, dikes, and other appropriate measures should be taken. Contaminated surfaces may be slippery. After containment, dispose according to Section 13. Wear an appropriate respirator with ammonia/methylamine/P100 or combination cartridges for large area spills. Use a supplied air respirator for more extreme circumstances.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store at room temperature. Keep away from strong acids, strong bases, oxidizers and reducing agents.

OTHER PRECAUTIONS: NONE

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: No special requirements

VENTILATION: Use in well ventilated areas.

RESPIRATORY PROTECTION: None needed when product is used as intended. Use ammonia/methylamine/P100 or combination cartridges with a full-face respirator if additional protection is desired.

EYE PROTECTION: Use splash-proof goggles when handling this material. Eyewash fountains should be readily available.

SKIN PROTECTION: Wear chemical gloves when handling this material. Materials resistant to weak organic bases should be chosen such as butyl, neoprene, nitrile, or equivalent.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: NONE

WORK HYGIENIC PRACTICES: Use caution as with any liquid base of $pH = \sim 10$.

EXPOSURE GUIDELINES: No TLV or PEL established for this mixture

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: clear to light-straw liquid

ODOR: slight ammonia odor PHYSICAL STATE: liquid

pH AS SUPPLIED: 9.5 – 10.5

pH (Other): NA BOILING POINT:

F: 215 **C**: 101.7

FREEZING POINT: not established

VAPOR PRESSURE (mmHg): not established

VAPOR DENSITY (AIR = 1): not established

SPECIFIC GRAVITY (H2O = 1): 1.02 @ 25 degrees C

EVAPORATION RATE: not established

SOLUBILITY IN WATER: completely soluble

PERCENT SOLIDS BY WEIGHT: not established

VOLATILE ORGANIC COMPOUNDS (VOC): NONE

SECTION 10: STABILITY AND REACTIVITY

STABILITY: This product is stable under normal conditions of use

CONDITIONS TO AVOID (STABILITY): Do not heat or freeze

INCOMPATIBILITY (MATERIAL TO AVOID): acids, bases, oxidizers, and reducers

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: none known

HAZARDOUS POLYMERIZATION: does not occur

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

LD50:

Based on a review of the data of the components, the LD50 is calculated to be approximately 2500 mg/kg.

SECTION 11 NOTES:

This product is a TRADE SECRET as defined in 29 CFR 1910.1200. Because this mixture has not been tested for toxicological properties, 29CFR1910.1200 requires the assumption that the mixture presents the same health hazards as each of the components, if they are present in concentrations greater than 1%. Note that for this mixture, more than 50% of the ingredients by weight are not hazardous. No single hazardous ingredient is present in concentrations exceeding 10% by weight.

Listed below are the chronic health hazards for all materials present in concentrations greater than 1% and that undiluted have health hazards associated with them. The relevancy to the mixture as a whole or to humans is unknown. Excessive exposure may cause similar effects. In the event of a medical emergency the identity of all the components will be divulged to a qualified medical professional.

The following effects were concluded as a result of laboratory testing of one or more of the individual undiluted components:

May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness.

Ingestion may cause irritation or burns of the mouth and throat.

In animals, effects have been reported in kidneys and liver.

In animals, birth defects have been observed only in exaggerated doses that were toxic to the mother.

Prolonged inhalation may cause drowsiness, lassitude, and inability to concentrate.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Based on a review of the components, the LC50 (bluegill, 96 hrs.) is calculated to be approximately 75 ppm.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This product is toxic to fish. Do not put the undiluted product into bodies of water

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

This material is not classified as hazardous according to DOT regulations as found in 49 CFR Part 173. This product has been tested as described in 49 CFR 173.136 and 49 CFR 173.137 using the required procedures from OECD 404 for corrosivity.

OTHER AGENCIES:

This material is classified as hazardous according to the OSHA Hazard Communication regulation 29 CFR 1910.1200.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All ingredients are on the TSCA inventory or are not required to be listed. CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): NONE SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): NONE

SECTION 16: OTHER INFORMATION

PREPARED BY: Libby Laboratories

1700 Sixth Street Berkeley, CA 94710

DISCLAIMER:

This product is proprietary and considered to be a TRADE SECRET under 29 CFR 1910.1200. This MSDS has been prepared to comply with the OSHA Hazard Communication regulations. The information contained herein is based on data from direct testing or derived from the Material Safety Data Sheets of the ingredients. We believe it contains all needed information to protect worker's health.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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