Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Biosonic® Ultrasonic Cement Remover Concentrate
Product Code(s): UC39, 09475

Relevant identified uses of the mixture and uses advised against: intended for use with an ultrasonic cleaner for cleaning medical instruments. Uses advised against: do not use with aluminum.

Synonyms: UC39

Manufacturer: Coltène/Whaledent Inc.
235 Ascot Parkway
Cuyahoga Falls, OH 44223 / USA
Phone: 1 330 916 8800
Fax: 1 330 916 7077
info.us@coltene.com

Authorized EC Representative: Coltène/Whaledent GmbH + Co. KG
89129 Langenau
Phone: 49 7345 805 0
Fax: 49 7345 805 201
info.de@coltene.com

Section 2: HAZARDS IDENTIFICATION

Classifications: Skin corrosion 1, Eye Damage 1, Acute oral toxicity cat 4, Flammable Liquid , cat 2

Appearance: Light Green Liquid, with alcohol odor
Contains: Alcohols, Sodium Hydroxide
Route(s) of Exposure: Dermal (Eye / Skin), Inhalation, Ingestion

Labeling Elements:

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Signal Word:</th>
<th>Hazard Statements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid, Category 2</td>
<td>DANGER</td>
<td>Highly flammable liquid and vapors.</td>
</tr>
<tr>
<td>Skin Corrosion Category 1A</td>
<td></td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>Eye Damage Category 1A</td>
<td></td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>Acute Toxicity Category 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prevention:

Wash hands thoroughly after handling. Wear protective gloves / protective clothing / eye protection / face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Response: If in eyes: Rinse cautiously with water for several minutes. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice / attention If swallowed: Immediately call a physician.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

Classification in Accordance with 67/548/EEC and 1999/45/EC: C – Corrosive, contains Sodium Hydroxide R10, R35, S45, S36/37/39 (see section 15 for full text)

PBT/vPvB Assessment: This product does not contain persistent, bioaccumulative and toxic chemicals (PBT’s) nor does this product contain any very persistent and very bioaccumulative chemicals (vPvB’s).
**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS</th>
<th>EC</th>
<th>Percent (w/w%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>215-185-5</td>
<td>10-20</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>2-5</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td>5-10</td>
</tr>
</tbody>
</table>

**Section 4: FIRST AID MEASURES**

**Inhalation:** Move victim to fresh air. Call 911 or emergency medical service. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

**Eyes:** Irrigate exposed eyes with copious amounts of room temperature water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.

**Skin:** Remove contaminated clothing and wash exposed area thoroughly with soap and water. A physician may need to examine the area if irritation or pain persists.

**Ingestion:** Do not induce vomiting. Drink water to dilute and contact a physician.

**Section 5: FIRE FIGHTING MEASURES**

VAPORS ARE FLAMMABLE AT AMBIENT TEMPERATURES AND ATMOSPHERIC PRESSURE. CONTAINERS MAY RUPTURE OR EXPLODE UNDER FIRE CONDITIONS.

**Extinguishing Media:** if material involved in fire: extinguish fire using agent water, CO₂, dry chemical or foam.

**Specific Hazards Arising from the Chemical:** none

**Protective Equipment and Precautions for Firefighters:** standard protection for all firefighters stated in this subsection of the SDS text should include self-contained breathing apparatus (SCBA) and full firefighting turn-out gear (Bunker gear).

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment, and Emergency Procedures:** use personal protection recommended in Section 8.

**Methods for Containment and Clean-up:** Ventilate contaminated area, remove all sources of ignition, stop or reduce discharge if it can be done safely.

**Other Information:** none noted

**Section 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:** use with adequate ventilation, do not use near ignition sources.

**Conditions for Safe Storage, Including Incompatibilities:** store in a cool, dry location. do not store with aluminum, tin, zinc, strong acids, nitromethane or nitro-compounds. Keep container closed.
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
<th>NIOSH REL:</th>
<th>OSHA PEL:</th>
<th>IDLH:</th>
<th>AIHA WEEL</th>
<th>STEL’s</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>10-20</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>2-5</td>
<td>200 ppm</td>
<td>200 ppm</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>5-10</td>
<td>400 ppm</td>
<td>400 ppm</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls: sufficient exhaust & general ventilation should be provided to keep vapor concentration below recommended levels.

Personal Protective Equipment (Eyes and Face): wear safety goggles or face shield.

Personal Protective Equipment (Skin): wear protective gloves

Personal Protective Equipment (Respiratory): none required for well-ventilated areas.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Light green liquid
- Odor: Alcohol
- pH (concentrate): 13.5
- Melting Point: No data
- Specific Gravity: 1.15 g/cc (25°C)
- Octanol / H₂O Coefficient: No data
- Molecular Weight: No data
- Auto Ignition: No data
- Flash Point: 29°C (84°F)
- Vapor Density: No data
- VOC: No data

- Viscosity: 100 cps
- Odor Threshold: No data
- Boiling Point: 87°C (188.6°F)
- Solubility (H₂O): Infinitely soluble in water
- Density: 1.15 g/cc (25°C)
- Evaporation Rate: No data
- Decomposition Temp: No data
- LFL: No data
- UFL: No data
- Vapor Pressure: 52 mmHg (25°C)
- Flammability Class: No data

Section 10: STABILITY AND REACTIVITY

- Reactivity: Reactive with oxidizing agents and acids
- Chemical Stability: chemically stable
- Possibility of Hazardous Reactions: this product is not known to be susceptible to chemical reactions that can result in undesirable effect(s).
- Conditions to Avoid: acidic conditions
- Incompatibility: acids and acid fumes, chemically active metals: potassium, calcium, powdered aluminum, magnesium, tin, and zinc, nitromethane or nitro-compounds
- Hazardous Decomposition Products: None

Section 11: TOXICOLOGICAL INFORMATION

- Likely Routes of Exposure: dermal (eye and skin), ingestion, and inhalation
- Hazardous Component: Sodium Hydroxide, Alcohols
**Toxicity:** The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.

- **Inhalation:** will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis.
- **Skin:** contact with this material may cause severe irritation and corrosion of tissue. Repeated exposure may cause dermatitis.
- **Eye contact:** can cause severe irritation, corrosion with possible corneal damage and blindness.
- **Ingestion:** may cause irritation, corrosion/ulceration, nausea, and vomiting

**Sensitization:** not a sensitizer.

**Carcinogenicity:** does not contain any substances classified as carcinogens by NTP, ACGIH, IARC or OSHA

**Mutagenicity:** not mutagenic

**Reproductive Toxicity:** not toxic for reproduction nor is this product teratogenic.

**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:** Concentrate is hazardous for the aquatic environment.

**Persistence / Degradability** This material is alkaline and may raise the pH of surface waters with low buffering capacity. This material is believed to exist in the disassociated state in the environment.

**Bioaccumulative Potential:** will not bioconcentrate in fish and aquatic organisms nor will it adsorb to sediment and suspended organic matter.

**Mobility in Soil:** moderate to high mobility in soil

**Other Adverse Effects:** none known.

This product does not contain persistent, bioaccumulative and toxic chemicals (PBT’s) nor does this product contain any very persistent and very bioaccumulative chemicals (vPvB’s).

**Section 13: DISPOSAL CONSIDERATIONS**

**Disposal:** May be diluted with large amounts of water and flushed down the sewer or drain. Always ensure disposal is in accordance with regional regulation.

**Additional Disposal Considerations:** Dispose if shelf-life has been exceeded.
Section 14: TRANSPORT INFORMATION

Emergency Response Guide Number: 154

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proper Shipping Name</th>
<th>Technical Shipping Name</th>
<th>UN-No.</th>
<th>Hazard Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea Transport IMDG/GGV Sea*</td>
<td>CORROSIVE LIQUID FLAMMABLE, N.O.S</td>
<td>Contains Sodium</td>
<td>UN2920</td>
<td>3, 8 PG II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Sodium Hydroxide, Isopropanol)</td>
<td>hydroxide and Alcohols</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Transport ICAO-Ti and IATA-DGR*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 15: REGULATORY INFORMATION

SARA Sections 302 and 304: This product does not contain Extremely Hazardous Substances (EHS) and is not subject to emergency planning requirements.

CERCLA: This product does not contain CERCLA Hazardous Substances and is not subject to reporting requirements.

SARA Section 313:

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS#</th>
<th>%w/w</th>
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<td>5-10</td>
</tr>
</tbody>
</table>

International Inventories:

US (TSCA): The components within this product are included on the TSCA Inventory of Chemical Substances.
Canada (DSL): All ingredients are on the inventory or exempt from listing.
European Union (EINECS): All ingredients conform to the EU requirements.
Japan (ENCS): All other ingredients are on the inventory or exempt from listing.
Philippines (PICCS): All other ingredients are on the inventory or exempt from listing.
South Korea (KECL): All ingredients are on the Inventory or exempt from listing.
Australia (AICS): All ingredients are on the Inventory or exempt from listing.
New Zealand (NZIoC): All ingredients are on the Inventory or exempt from listing.
China (IECSC): All ingredients are on the Inventory or exempt from listing.

California Proposition 65: There are no chemicals within this mixture on the Proposition 65 List.

Canadian Regulations require the inclusion of the following statements under “Regulatory Information”: This product has been classified in accordance with the hazard criteria of the controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
Biosonic® Ultrasonic Cement Remover Concentrate

Revision Date: September 2014   Internal Document Number: 48239A


Section 16: OTHER INFORMATION

NFPA Ratings:   HMIS Ratings:

Health: 2     Health: 2
Fire: 3       Fire: 3
Reactivity: 0  Reactivity: 0

(NFPA and HMIS Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe)

REVISION HISTORY

<table>
<thead>
<tr>
<th>REVISION</th>
<th>DATE</th>
<th>ECN#</th>
<th>CHG BY</th>
<th>APPR BY</th>
<th>DESC. OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>09/12/14</td>
<td>14378</td>
<td>TG</td>
<td>SBL</td>
<td>Updated MSDS to GHS/SDS Format. 48239 Revision A supersedes 48026 revision H.</td>
</tr>
</tbody>
</table>

The information and recommendations set forth herein are presented in good faith and are believed to be correct as of the date hereof. Coltène/Whaledent Inc., however, makes no representations as to the completeness of this information and supplies it on the condition that the persons receiving same will make their own determination as to its suitability of their purposes prior to use. In no event will Coltène/Whaledent Inc. be responsible for damages of any nature whatsoever resulting from use of or reliance upon information.