SAFETY DATA SHEET

1. Identification

<table>
<thead>
<tr>
<th>Product Identifier</th>
<th>Ultimate Stone &amp; Grout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td></td>
</tr>
<tr>
<td>Product code</td>
<td>CU-2420</td>
</tr>
<tr>
<td>Recommended use</td>
<td>Stone and grout cleaner.</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>Professional use only.</td>
</tr>
<tr>
<td>Manufacturer information</td>
<td>Chemical Universe, Inc.</td>
</tr>
<tr>
<td>Company name</td>
<td>Chemical Universe, Inc.</td>
</tr>
<tr>
<td>Address</td>
<td>1133 Saline St. North Kansas City, MO 64116</td>
</tr>
<tr>
<td>Telephone</td>
<td>(816) 471-3602</td>
</tr>
<tr>
<td>Fax</td>
<td>(816) 474-3302</td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>PERS (800) 633-8253</td>
</tr>
<tr>
<td>24 hour Emergency</td>
<td>(800) 633-8253</td>
</tr>
</tbody>
</table>

2. Hazard(s) Identification

| Physical hazards | Not classified. |
| Health hazards | Acute toxicity, oral Category 5 |
| | Skin corrosion Category 1 |
| | Eye damage Category 1 |
| Environmental hazards | Not listed. |
| OSHA defined hazards | Not listed. |
| Label elements | |

Signal word | Danger |
Hazard statement | May be harmful if swallowed. Causes severe skin burns and eye damage. |
Precautionary statement

Prevention | Do not breathe dusts or mists. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. |
Response | Call a POISON CENTER/doctor/medical professional if you feel unwell. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower/ Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor/medical professional. Specific treatment (see section 4 on the Safety Data Sheet.) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
Storage | Store locked up. |
Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
Hazard(s) not otherwise classified (HNOC) | None. |
Supplemental information | None. |
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>9-15</td>
</tr>
<tr>
<td></td>
<td>Nonylphenol ethoxylate</td>
<td>127087-87-0</td>
<td>3-8</td>
</tr>
<tr>
<td></td>
<td>Sodium xylene sulfonate</td>
<td>7757-82-6</td>
<td>3-8</td>
</tr>
<tr>
<td></td>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>C8-10 ethoxylate phosphate</td>
<td>68130-47-2</td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>Potassium hydroxide</td>
<td>1310-58-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>80-100</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

**Eye contact**
Rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention. Eye wash stations should be located in work area.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur. Do not induce vomiting.

**Most important symptoms/effects, acute and delayed**
Dermatitis. Rash. May cause an allergic skin reaction.

**Indication of immediate medical attention and special treatment needed**
Provide general support measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protecting clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
Move containers from fire area if you can do so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
No unusual fire or explosion hazards noted.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Wear appropriate protective equipment and clothing during clean-up. Wear eye/face protection.

**Methods and materials for containment and cleaning up**
Caution – spillages may be slippery.

Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas.
Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions
Do not release into the environment (see section 12). Avoid discharge into areas not consistent with package labeling.

7. Handling and storage

Precautions for safe handling
Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Do not store in extreme conditions.

8. Exposure controls/personal protection

Occupational exposure limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>PEL</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>PEL</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

US ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>STEL</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>STEL</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Species</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>200 mg/g</td>
<td>Creatinine</td>
<td>Urine</td>
<td>End of shift.</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Emergency eye wash stations and showers should be readily accessible. Provide natural or mechanical ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection
Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear long sleeve shirts with pants.

Respiratory protection
Respiratory protection not required.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using do not smoke or use chewing tobacco. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical State: Liquid.
Color: Colorless.
Odor                  Sweet.
Odor threshold        Not available.
pH                    13.5
Melting/freezing point Not available.
Initial boiling point  >212°F (100°C)
and boiling range     
Flash point            >212°F (100°C)
Evaporation rate       Not available.
Flammability           Not available.
Flammability Limits    
  Upper                 Not available.
  Lower                 Not available.
Vapor pressure         Not available.
Vapor density          Not available.
Specific gravity (water=1)  1.05
Solubility in water    Soluble
Partition coefficient  Not available.
(n-octanol/water)      
Auto-ignition temperature Not available.
Decomposition temperature Decomposes on heating.
Viscosity              Not available.

10. Stability and reactivity

Reactivity            This product is stable and non-reactive under normal conditions of use.
Chemical stability    Material is stable under normal conditions.
Possibility of hazardous reactions
  Hazardous polymerization does not occur.
Conditions to avoid    Heat, flames can cause product to decompose.
Incompatible materials  Strong acids, strong bases, strong oxidizing agents.
Hazardous decomposition products
  Aldehydes, ketones, organic acids, carbon dioxide, carbon monoxide.

11. Toxicological information

Information on likely routes of exposure
  Ingestion            Corrosive to mucous membranes, will damage tissue if there is prolonged contact.
  Inhalation           Expected to be a low inhalation hazard.
  Skin contact         Repeated and/or prolonged skin contact will cause irritation and/or burns.
  Eye contact          Causes severe eye damage. May cause severe corneal injury.
Symptoms related to the physical, chemical and toxicological characteristics
  Dermatitis. Rash. May cause an allergic skin reaction.
Acute toxicity        This product is harmful if swallowed.

<table>
<thead>
<tr>
<th>Product</th>
<th>Route and Species</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultimate Stone &amp; Grout (CAS mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td>Oral, rat</td>
<td>3151.8 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Dermal, rabbit</td>
<td>&gt;5,000 mg/kg estimated</td>
</tr>
</tbody>
</table>

*Estimates for product may be based on additional component data not shown
Skin corrosion/irritation Causes severe skin burns.
Serious eye damage/irritation Causes serious eye damage.
Respiratory sensitization Not classified.
Skin sensitization Not classified.
Germ cell mutagenicity Not classified.
Carcinogenicity Not considered a carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not Listed.

Reproductive toxicity Not classified.
Specific target organ toxicity – single exposure Not classified.
Specific target organ toxicity – repeated exposure Not classified.
Aspiration hazard Not considered an aspiration hazard.

12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultimate Stone &amp; Grout (CAS mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Crustacea</td>
<td>Daphnia</td>
<td>EC50 (48hr): 173.25 mg/L estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>Unspecified</td>
<td>LC50 (96hr): 79.75 mg/L estimated</td>
</tr>
</tbody>
</table>

*Estimates for product may be based on additional component data not shown

Persistence and degradability Nonylphenyl ethoxylate: not considered readily biodegradable, but doesn’t mean this material isn’t biodegradable under certain environmental conditions.
Bioaccumulative potential No data available.
Mobility in soil Not available.
Other adverse effects The pH of this product may cause it to be toxic to aquatic and terrestrial organisms.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Do not release to the environment.

Local disposal regulations Dispose in accordance with all applicable regulations
Waste from residues/unused product Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. (see: Disposal instructions).
Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may contain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

| UN number | UN1760 |
UN proper shipping name: Corrosive Liquids, n.o.s. (Contains: Potassium Hydroxide)
Transport hazard class(es):
  Class: 8
  Subsidiary risk: -
  Packaging group: III
  Marine pollutant: No

Special precautions for user:
Read safety instructions, SDS, and emergency procedures before handling.
Not intended to be transported in bulk.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations:
  SARA 302 Extremely hazardous substance
    Not listed.
  SARA 304 Emergency release notification
    Not listed.
  SARA 311/312 Hazard Categories
    Immediate Hazard - Yes
    Delayed Hazard – No
    Fire Hazard – No
    Pressure Hazard – No
    Reactivity Hazard – No
  SARA 313 (TRI reporting)
    2-butoxyethanol (Glycol Ether Category)

16. Other information, including date of preparation or last revision

Issue date: 10/17/2014
Revision date: 10/17/2014
Version #: 1
HMIS® ratings:
  Health: 2
  Flammability: 0
  Physical hazard: 0
<table>
<thead>
<tr>
<th>NFPA ratings</th>
<th>Health: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flammability: 0</td>
</tr>
<tr>
<td></td>
<td>Instability: 0</td>
</tr>
</tbody>
</table>

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, and have been obtained from resources believed to be reliable. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified by the text.

**Revision information**

First issue