



# SAFETY DATA SHEET

## 1. Identification

|                                      |  |                |
|--------------------------------------|--|----------------|
| <b>Product Identifier</b>            | <b>Bio-Powder</b>                              |                |
| <b>Other means of identification</b> |  |                |
| <b>Product code</b>                  | CU-3230  |                |
| <b>Recommended use</b>               | Bio-enzymatic pre-spray.                       |                |
| <b>Recommended restrictions</b>      | None.  |                |
| <b>Manufacturer information</b>      |  |                |
| <b>Company name</b>                  | Chemical Universe, Inc.                        |                |
| <b>Address</b>                       | 1133 Saline St.<br>North Kansas City, MO 64116 |                |
| <b>Telephone</b>                     | (816) 471-3602                                 |                |
| <b>Fax</b>                           | (816) 474-3302                                 |                |
| <b>Emergency phone number</b>        | PERS   | (800) 633-8253 |
|                                      | 24 hour Emergency                              | (800) 633-8253 |

## 2. Hazard(s) Identification

|                              |                      |             |
|------------------------------|----------------------|-------------|
| <b>Physical hazards</b>      | Not classified.      |             |
| <b>Health hazards</b>        | Acute toxicity, oral | Category 5  |
|                              | Skin Irritant        | Category 2  |
|                              | Eye Irritant         | Category 2A |
| <b>Environmental hazards</b> | Not classified.      |             |
| <b>OSHA defined hazards</b>  | Not listed.          |             |
| <b>Label elements</b>        |                      |             |



|  |  |  |
|--|--|--|
| <b>Signal word</b>                               | Warning.   |  |
| <b>Hazard statement</b>                          | May be harmful if swallowed.<br>Causes skin irritation.<br>Causes serious eye irritation.  |  |
| <b>Precautionary statement</b>                   |  |  |
| <b>Prevention</b>                                | Wash hands and exposed skin thoroughly after handling. Wear protective gloves. Wear eye protection/face protection.  |  |
| <b>Response</b>                                  | Call a POISON CENTER/doctor/medical professional if you feel unwell. IF ON SKIN: Wash with plenty water. Specific treatment (see Section 4 on the Safety Data Sheet) If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |  |
| <b>Storage</b>                                   |  |  |
| <b>Disposal</b>                                  |  |  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None.  |  |
| <b>Supplemental information</b>                  | None.  |  |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                            | CAS number | %     |
|--|------------|-------|
| Sodium Carbonate                         | 497-19-8   | 20-30 |
| Sodium tripolyphosphate                  | 7758-29-4  | 20-30 |
| 2-butoxyethanol                          | 111-76-2   | 1-3   |
| D-limonene                               | 5989-27-5  | 1-3   |
| Other components below reportable levels |            | 30-60 |

### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.   |
| <b>Skin contact</b>   | Remove contaminated clothing immediately and wash skin with soap and water. Neutralize burns with vinegar. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. |
| <b>Eye contact</b>  | Rinse with water for at least 15 minutes. Remove contact lenses if present and easy to do so. Immediately call a physician or transport to hospital.  |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention immediately. Do not induce vomiting.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Can cause serious eye damage. Can cause burning sensation in affected areas. Shortness of breath, respiratory tract irritation or damage.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general support measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. Use with extreme caution.                             |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).                      |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protecting clothing must be worn in case of fire. |
| <b>Fire-fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.                                 |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted.   |

### 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| <b>Methods and materials for containment and cleaning up</b>               | This product is miscible in water.<br><br>Large spills: Place the material in containers using a broom or shovel. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with   |

water.

Small spills: Sweep up and put into containers. 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** Avoid discharge into areas not consistent with package labeling.

## 7. Handling and storage

**Precautions for safe handling** Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

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

| Components      | Type | Value  |
|-----------------|------|--------|
| 2-butoxyethanol | PEL  | 50 ppm |

#### US ACGIH Threshold Limit Values

| Components      | Type | Value  |
|-----------------|------|--------|
| 2-butoxyethanol | STEL | 20 ppm |

### Biological limit values

#### ACGIH Biological Exposure Indices

| Components      | Value    | Determinant | Species | Sampling Time |
|-----------------|----------|-------------|---------|---------------|
| 2-butoxyethanol | 200 mg/g | Creatinine  | Urine   | End of shift. |

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level. It is recommended that users of this product perform a risk assessment to determine the appropriate personal protective equipment.

### 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** None.

**Respiratory protection** Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** None.

**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                          | Powder              |
| Color                                   | Green.              |
| Odor                                    | Citrus.             |
| Odor threshold                          | Not available.      |
| pH                                      | 9-10 (10% solution) |
| Melting/freezing point                  | Not applicable.     |
| Initial boiling point and boiling range | Not applicable.     |
| Flash point                             | Not applicable.     |
| 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)              | 1.9                 |
| Solubility in water                     | Soluble.            |
| Partition coefficient (n-octanol/water) | Not available.      |
| Auto-ignition temperature               | Not available.      |
| Decomposition temperature               | Not available.      |
| Viscosity                               | Not applicable.     |

## 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. Store in a cool dark place. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur                                 |
| Conditions to avoid                | Avoid storage in elevated temperatures.                                 |
| Incompatible materials             | Bases, amines, metals.  |
| Hazardous decomposition products   | No hazardous decomposition products. In case of fire see section 5.     |

## 11. Toxicological information

### Information on likely routes of exposure

|  |   |
|--|---|
| Ingestion  | Do not ingest. May be harmful if swallowed.                       |
| Inhalation   | Do not inhale. Irritating to the respiratory tract.               |
| Skin contact   | Can cause skin irritation. For personal protection see Section 8. |
| Eye contact  | Can cause serious eye irritation.                                 |
| Symptoms related to the physical, chemical and toxicological characteristics | Coughing, wheezing, shortness of breath.                          |
| Acute toxicity   | Harmful if swallowed.   |

| Product                  | Route and Species | LD <sub>50</sub>      |
|--------------------------|-------------------|-----------------------|
| Bio-Powder (CAS mixture) |                   |                       |
| <b>Acute</b>             | <i>Oral, rat</i>  | 3,700 mg/kg estimated |

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

|   |  |
|---|--|
| <b>Skin corrosion/irritation</b>                                      | Causes skin irritation.  |
| <b>Serious eye damage/irritation</b>                                  | Causes serious eye irritation.   |
| <b>Respiratory sensitization</b>                                      | Not considered a respiratory sensitizer.   |
| <b>Skin sensitization</b>   | Not considered a skin sensitizer.  |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>  | Not considered a carcinogen.   |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
|   | Not Listed.  |
| <b>Reproductive toxicity</b>  | No data available.   |
| <b>Specific target organ toxicity – single exposure</b>               | Not classified.  |
| <b>Specific target organ toxicity – repeated exposure</b>             | No data available.   |
| <b>Aspiration hazard</b>  | No data available.   |

## 12. Ecological information

### Ecotoxicity

| Product                  | Species        | Test Results                          |
|--------------------------|----------------|---------------------------------------|
| Bio-Powder (CAS mixture) |                |                                       |
| <b>Aquatic</b>           |                |                                       |
| Fish                     | Fathead minnow | LC <sub>50</sub> = 252 mg/L estimated |
| Crustacea                | Daphnia Magna  | EC <sub>50</sub> = 474 mg/L estimated |

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

|   |  |
|---|--|
| <b>Persistence and degradability</b>                              | 2-butoxyethanol is considered readily biodegradable. |
| <b>Bioaccumulative potential</b>                                  | Bioaccumulative potential is low.                    |
| <b>Partition coefficient n-octanol/water (log K<sub>OW</sub>)</b> | Not available.                                       |
| <b>Mobility in soil</b>   | No data available.                                   |
| <b>Other adverse effects</b>                                      | No data available.                                   |

## 13. Disposal considerations

|   |   |
|---|---|
| <b>Disposal instructions</b>              | 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.                          |
| <b>Local disposal regulations</b>         | Dispose in accordance with all applicable regulations   |
| <b>Hazardous waste code</b>               | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues/unused product</b> | 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). |
| <b>Contaminated packaging</b>             | 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

Not regulated as dangerous goods.

## 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

|                             |   |
|-----------------------------|---|
| <b>Issue date</b>           | 3/12/2015   |
| <b>Revision date</b>        | 3/12/2015   |
| <b>Version #</b>            | 1   |
| <b>HMIS® ratings</b>        | Health: 1<br>Flammability: 0<br>Physical hazard: 0  |
| <b>NFPA ratings</b>         | Health: 1<br>Flammability: 0<br>Instability: 0  |
| <b>Disclaimer</b>           | 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. |
| <b>Revision information</b> | First issue   |