SAFETY DATA SHEET

1. Identification

Product identifier: BRUTAB 6S
Other means of identification:
- Product number: 161021
Recommended use: Effervescent disinfectant tablets
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

- **Manufacturer**
  - Company name: Brulin & Company, Inc.
  - Address: P.O. Box 270, Indianapolis, IN 46206, United States
  - Telephone: Phone: 317-923-3211, Fax: 317-925-4596
  - Website: www.Brulin.com
  - Emergency phone number: CHEMTREC 1-800-424-9300

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards:
- Acute toxicity, oral: Category 4
- Acute toxicity, dermal: Not classified
- Skin corrosion/irritation: Not classified
- Serious eye damage/eye irritation: Category 2A
- Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation

OSHA defined hazards: Not classified.

Label elements

- **Signal word**: Warning
- **Hazard statement**: Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation.
- **Prevention**: Avoid breathing dust. Do not eat, drink or smoke when using this product. Use only in well-ventilated areas. Wear safety glasses with side shields (or goggles). Wear protective gloves. Wash hands thoroughly after handling.
- **Response**: 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. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
- **Storage**: Store in a well-ventilated place. Keep container tightly closed. Store away from incompatible materials. Keep out of the reach of children.
- **Disposal**: Dispose of waste and residues in accordance with local authority requirements.
- **Hazard(s) not otherwise classified (HNOC)**: None known.
- **Supplemental information**: Contact with acids liberates toxic gas.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid, sodium salt</td>
<td>2893-78-9</td>
<td>45 - &lt;50</td>
</tr>
<tr>
<td>Adipic acid</td>
<td>124-04-9</td>
<td>35 - &lt;40</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>10 - &lt;15</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Notes to physician**
Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**Most important symptoms/effects, acute and delayed**
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

5. Fire-fighting measures

**Suitable extinguishing media**
Alcohol resistant foam. Water fog. 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 protective clothing must be worn in case of fire.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
Collect spillage. Sweep up or gather material and place in appropriate container for disposal. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

7. Handling and storage

**Precautions for safe handling**
Mix only with water. Do not mix with other chemicals. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Provide adequate ventilation. Contamination with moisture, dirt, organic matter or other chemicals or any other foreign matter may start a chemical reaction with generation of heat, liberation of hazardous gases and possible generation of fire and explosion. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**
Store in original tightly closed container. Keep container dry. Do not store near acids. Contact with acids liberates toxic gas. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adipic acid (CAS 124-04-9)</td>
<td>TWA</td>
<td></td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Keep formation of dusts, particulates and fumes to a minimum. Ensure adequate ventilation, especially in confined areas. Provide eyewash station.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection
For prolonged or repeated skin contact use suitable protective gloves.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations
When using, do not eat, drink or smoke. 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.

9. Physical and chemical properties

Appearance
tablet

Form
Solid.

Color
white - off white

Odor
slight chlorine

Odor threshold
Not available.

pH
5.5 - 6.5

Melting point/freezing point
Not available.

Boiling point
Not Applicable

Flash point
Not applicable.

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Vapor pressure
Not available.

Vapor density
Not available.

Solubility(ies)

Solubility (water)
100 %

Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

Specific gravity
Not available.

VOC (Weight %)
0

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.
Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Contact with incompatible materials.

Incompatible materials
Acids. Alkaline. Combustible material. Reducing agents. The active ingredient in this formulation is a strong oxidizing agent.

Hazardous decomposition products
Chlorine.

11. Toxicological information

Toxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRUTAB 6S (Mixture)</td>
<td>Acute Dermal LD50 Rabbit: &gt; 4000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: 1823 mg/kg</td>
</tr>
</tbody>
</table>

Information on likely routes of exposure

Eye contact
Causes serious eye irritation. Dust in the eyes will cause irritation.

Skin contact
Direct contact with wet material or moist skin may cause severe irritation. Dry material is less irritating than wet material. Health injuries are not known or expected under normal use.

Ingestion
Harmful if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. This product is sold in a tablet form.

Inhalation
May cause irritation to the respiratory system. This material is contained in a tablet form, respirable particulates are generally not encountered.

Symptoms related to the physical, chemical and toxicological characteristics
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Chronic effects
Prolonged inhalation may be harmful.

Toxicological information
Occupational exposure to the substance or mixture may cause adverse effects.

12. Ecological information

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

Persistence and degradability
The materials used in this preparation will not persist in the environment. Hydrolysis products of cyanuric acid and chloride ion are biodegradable.

Bioaccumulative potential
This material does not contain chemicals that have known bioaccumulative potential. Trichloroisocyanuric acid hydrolyses in water liberating chlorine and cyanuric acid. These products are not bioaccumulative.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
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 retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Adipic acid (CAS 124-04-9) Listed.

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

CERCLA (Superfund) reportable quantity
Adipic acid: 5000

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
No

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
US. Massachusetts RTK - Substance List
Adipic acid (CAS 124-04-9)
Dichloroisocyanuric acid, sodium salt (CAS 2893-78-9)

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

US. Pennsylvania RTK - Hazardous Substances
Adipic acid (CAS 124-04-9)
Dichloroisocyanuric acid, sodium salt (CAS 2893-78-9)

US. Rhode Island RTK
Adipic acid (CAS 124-04-9)
US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date: 04-22-2014
Revision date: 06-19-2015
Version #: 05

Further information
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
CORROSIVE
Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin.

Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates 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 in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.