SAFETY DATA SHEET

1. Identification

Product identifier: BRU-CLEAN TBC

Other means of identification:

Product number: 161015

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:

Acute toxicity, oral: Not classified
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

Health hazards:

OSHA defined hazards:

Not classified.

Supplemental information:

Contact with acids liberates toxic gas.

Signal word: Warning

Hazard statement:
Causes serious eye irritation. May cause respiratory irritation.

Prevention:
Avoid breathing dust. 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. Call a poison center/doctor if you feel unwell.

Storage:

Disposal:
Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC):
None known.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dichloroisocyanuric acid, sodium salt</td>
<td>2893-78-9</td>
<td>45 - &lt;50</td>
</tr>
<tr>
<td></td>
<td>Adipic acid</td>
<td>124-04-9</td>
<td>25 - &lt;30</td>
</tr>
<tr>
<td></td>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>5 - &lt;10</td>
</tr>
<tr>
<td></td>
<td>Sodium Dodecylbenzene Sulfonate</td>
<td>25155-30-0</td>
<td>1 - &lt;5</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. Get medical attention if symptoms occur.

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. 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.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures


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.

Never return spills to original containers for re-use. 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. Do not breathe dust. Minimize dust generation and accumulation. 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). Keep out of the reach of children.
8. Exposure controls/personal protection

Occupational exposure limits

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

Appropriate engineering controls

General ventilation normally adequate. 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

Not normally needed. For prolonged or repeated skin contact use suitable protective gloves.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

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 or orange

Odor

Slight chlorine

Odor threshold

Not available.

pH

5 - 6

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
Hazardous polymerization does not occur.

Conditions to avoid
Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents. 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>BRU-CLEAN TBC (Mixture)</td>
<td>Acute Dermal LD50 Rabbit: &gt; 5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: &gt; 2000 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
This product is sold in a tablet form. However, ingestion is not likely to be a primary route of occupational exposure. Expected to be a low ingestion hazard.

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.

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. Accumulation in aquatic organisms is expected.

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.
- Sodium Dodecylbenzene Sulfonate (CAS 25155-30-0) Listed.

Not listed.

**CERCLA (Superfund) reportable quantity**
- Adipic acid: 5000
- Sodium Dodecylbenzene Sulfonate: 1000

**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)
  - Sodium Dodecylbenzene Sulfonate (CAS 25155-30-0)
- **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)
Sodium Dodecylbenzene Sulfonate (CAS 25155-30-0)

**US. Rhode Island RTK**
Adipic acid (CAS 124-04-9)
Sodium Dodecylbenzene Sulfonate (CAS 25155-30-0)

**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>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</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>No</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>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</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** 09-04-2015

**Version #** 01

**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.