### 1. Identification

**Product identifier**
- **Product name**: Bellacide® 337

**Recommended use of the chemical and restrictions on use**

**Application**: FOR RESEARCH AND DEVELOPMENT

**Recommended USE:**

**Details of the supplier of the safety data sheet**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>BWA Water Additives UK Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 Brightgate Way</td>
</tr>
<tr>
<td></td>
<td>Manchester M32 0TB</td>
</tr>
<tr>
<td></td>
<td>United Kingdom</td>
</tr>
<tr>
<td>F: +44 (0)161 864 6666</td>
<td></td>
</tr>
<tr>
<td>(Technical/commercial enquiries)</td>
<td></td>
</tr>
<tr>
<td>T: +44 (0)161 864 6699</td>
<td></td>
</tr>
<tr>
<td>E: <a href="mailto:msds@wateradditives.com">msds@wateradditives.com</a></td>
<td></td>
</tr>
</tbody>
</table>

**Emergency telephone number**

| Emergency telephone | +44(0) 208 762 8322 |

### 2. Hazard(s) identification

**Classification of the substance or mixture**

<table>
<thead>
<tr>
<th>Physical hazards</th>
<th>Not Classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazards</td>
<td>Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412</td>
</tr>
</tbody>
</table>

**Label elements**

**Hazard symbols**

- ☢️
- 🚨
- ☠️

**Signal word**

- Danger

**Hazard statements**

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.
Bellacide® 337

Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 If swallowed: Call a poison center/ doctor if you feel unwell.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/ doctor.
P321 Specific treatment (see medical advice on this label).
P330 Rinse mouth.
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

DIDECYLDIMETHYLAMMONIUM CHLORIDE

3. Composition/Information on ingredients

Mixtures

BRONOPOL (INN) 5-10%
CAS number: 52-51-7
M factor (Acute) = 10

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 3 - H331
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335
Aquatic Acute 1 - H400
Aquatic Chronic 2 - H411

DIDECYLDIMETHYLAMMONIUM CHLORIDE 1-5%
CAS number: 7173-51-5
M factor (Acute) = 10

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Aquatic Acute 1 - H400
Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.
Bellacide® 337

**Ingestion**
Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if symptoms are severe or persist. If in doubt, get medical attention promptly.

**Skin Contact**
Remove contaminated clothing. Rinse immediately with plenty of water. Get medical attention if symptoms are severe or persist after washing.

**Eye contact**
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention.

**Most important symptoms and effects, both acute and delayed**

**Inhalation**
No specific symptoms known.

**Ingestion**
No specific symptoms known.

**Skin contact**
Causes skin irritation.

**Eye contact**
Risk of serious damage to eyes.

---

**5. Fire-fighting measures**

**Extinguishing media**
Suitable extinguishing media: Foam.

**Advice for firefighters**
Move containers from fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.

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**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.

**Environmental precautions**
Toxic to aquatic life with long lasting effects. To prevent release, place container with damaged side up. Do not discharge into drains or watercourses or onto the ground.

**Methods and material for containment and cleaning up**

**Methods for cleaning up**
Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. Wash thoroughly after dealing with a spillage.

**Reference to other sections**
For personal protection, see Section 8. For waste disposal, see section 13.

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**7. Handling and storage**

**Precautions for safe handling**

**Usage precautions**
Avoid spilling. Wear protective clothing as described in Section 8 of this safety data sheet. Do not get in eyes, on skin, or on clothing.

**Conditions for safe storage, including any incompatibilities**
Bellacide® 337

Storage precautions

Store in a tightly-closed, original container in a dry, cool, and well-ventilated place. Store at temperatures not exceeding 50°C /122°F. Protect from freezing and direct sunlight. If frozen: once thawed, agitate container vigorously to ensure the product is homogeneous. Store away from the following materials; alkalis, acids, cyanides, reducing agents, oxidizing materials and aluminum. Do not use containers made of Carbon steel. Keep separate from food, feeds, fertilizers, and other sensitive materials.

Specific end uses(s)

Specific end use(s)
The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Ingredient comments
No exposure limits known for ingredient(s).

Exposure controls

Protective equipment
Eye/face protection
Wear eye protection.

Hand protection
Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Other skin and body protection
Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures
Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Contaminated clothing should be placed in a closed container for disposal or decontamination.

Respiratory protection
Wear a suitable dust mask.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance
Clear liquid.

Color
Colorless.

Odor
Slight.

Odor threshold
Not available.

pH
5.0-6.0

Melting point
-1.2°C

Initial boiling point and range
Not available.

Boiling Point:
Not available

Freezing Point:
Not available

Flash point
Not available.
Bellacide® 337

Evaporation rate  Not available.
Evaporation factor Not available.
Flammability (solid, gas)  No information available.
Upper/lower flammability or explosive limits  Not applicable.
Vapor pressure  No information available.
Vapor density  Not available.
Relative density  SG20/20: 1.0
Bulk density  No information available.
Auto-ignition temperature  Not available.
Decomposition Temperature  No information available.
Viscosity  Not available.
Explosive properties  Not considered to be explosive.
Oxidizing properties  Does not meet the criteria for classification as oxidizing.

10. Stability and reactivity
Reactivity  There are no known reactivity hazards associated with this product.
Stability  Stable at normal ambient temperatures.
Conditions to avoid  Avoid contact with the following materials: Oxidizing agents. Reducing agents. Alkalis.
Materials to avoid  Strong acids. Strong alkalis. Strong reducing agents.

11. Toxicological information
Information on toxicological effects
Acute toxicity - oral  3,129.0
Acute toxicity oral (LD₅₀ mg/kg)  Rat
ATE oral (mg/kg)  500.0
Acute toxicity - dermal  21,568.63
ATE dermal (mg/kg)  9.8
Acute toxicity - inhalation
ATE inhalation (dusts/mists mg/l)  Irritating to skin.
Skin corrosion/irritation  Causes serious eye damage.
Respiratory sensitization  No information available.
**Bellacide® 337**

**Skin sensitization**
Based on available data the classification criteria are not met.

**Germ cell mutagenicity**
Does not contain any substances known to be mutagenic.

**Carcinogenicity**
Does not contain any substances known to be carcinogenic.

**Reproductive toxicity**
Does not contain any substances known to be toxic to reproduction.

**Aspiration hazard**
Not anticipated to present an aspiration hazard, based on chemical structure.

**12. Ecological information**

**Ecotoxicity**
The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

**13. Disposal considerations**

**Waste treatment methods**

**General information**
When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods**
Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Dispose of waste product or used containers in accordance with local regulations.

**14. Transport information**

**General**
No other information known.

**UN Number**

**UN No. (International)**
3082

**UN No. (TDG)**
3082

**UN No. (IMDG)**
3082

**UN No. (ICAO)**
3082

**UN No. (DOT)**
3082

**UN proper shipping name**

**Proper shipping name (International)**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 2-BROMO-2-NITROPROPANE-1,3-DIOL) 9, PG III

**Proper shipping name (TDG)**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 2-BROMO-2-NITROPROPANE-1,3-DIOL) 9, PG III

**Proper shipping name (IMDG)**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 2-BROMO-2-NITROPROPANE-1,3-DIOL) 9, PG III

**Proper shipping name (ICAO)**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 2-BROMO-2-NITROPROPANE-1,3-DIOL) 9, PG III

**Proper shipping name (DOT)**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 2-BROMO-2-NITROPROPANE-1,3-DIOL) 9, PG III
Bellacide® 337

Transport hazard class(es)

Transport Labels (International) 9

Transport labels

Packing group

Packing group (International) III
DOT packing group III

Environmental hazards

Environmentally Hazardous Substance

15. Regulatory information

Inventories
JAPAN- IHSL
Japan MITI
Taiwan -TCSI

16. Other information

Revision comments
Section 2_ Added Health Hazard: Acute Oral and in Section 9_ added Melting Point

Issued by
BWA Water Additives Regulatory Group, +44(0)1618646699

Revision date 5/31/2019
Revision 1
Supersedes date 4/10/2018
SDS No. 21747

Hazard statements in full
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.