SAFETY DATA SHEET

**Section 1. Identification of the material and the supplier**

Product: BREVIS  
Item Code:  
Product Use: Fruit Thinner  
Restriction of Use: Refer to Section 15  
New Zealand Supplier: ADAMA New Zealand Ltd  
Address: Level 1/93 Bolt Road  
Tahunanui, Nelson 7011  
Telephone: +64 3 543 8275  
Fax Number: +64 3 543 8274  
Emergency Telephone: 0800 764 766 (National Poison Centre)  
Date of SDS Preparation: 18 July 2018

**Section 2. Hazards Identification**

This substance is hazardous according to the Hazardous Substances (Classification) Notice 2017  
EPA Approval No: HSR101178  
Pictograms  

<table>
<thead>
<tr>
<th>HSNO Classification</th>
<th>Hazard Code</th>
<th>Hazard Statement</th>
<th>GHS Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1D (oral)</td>
<td>H302</td>
<td>Harmful if swallowed.</td>
<td>Category 4</td>
</tr>
<tr>
<td>8.3A</td>
<td>H318</td>
<td>Causes serious eye damage.</td>
<td>Category 1</td>
</tr>
<tr>
<td>9.1B</td>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
<td>Category 2</td>
</tr>
<tr>
<td>9.2B</td>
<td>H422</td>
<td>Toxic to the soil environment.</td>
<td>-</td>
</tr>
<tr>
<td>9.3C</td>
<td>H433</td>
<td>Harmful to terrestrial vertebrates</td>
<td>-</td>
</tr>
</tbody>
</table>

**Prevention Code** | **Prevention Statement**  
P102 | Keep out of reach of children.  
P103 | Read label before use.  
P264 | Wash hands thoroughly after handling.  
P270 | Do not eat, drink or smoke when using this product.  
P273 | Avoid release to the environment.
P280 Wear eye protection/face protection

**Response Code** | **Response Statement**
--- | ---
P101 | If medical advice is needed, have product container or label at hand.
P330 | Rinse mouth.
P391 | Collect spillage.
P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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 or doctor/physician.

**Storage Code** | **Storage Statement**
--- | ---
None allocated | Store in the original, unopened container in a cool, dry, place, out of direct sunlight and away from stockfeed or foodstuffs. As a Class 9 Substance with Ecotoxicity Classifications storage of BREVIS must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed.

**Disposal Code** | **Disposal Statement**
P501 | Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill. Do not allow product to enter waterways. Do not burn product or container.

**Section 3. Composition / Information on Ingredients**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Wt%</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium diformate</td>
<td>70-90</td>
<td>544-17-2</td>
</tr>
<tr>
<td>4-amino-3-methyl-6-phenyl-1,2,4-triazin-5-one</td>
<td>10-&lt;25</td>
<td>41394-05-2</td>
</tr>
</tbody>
</table>

**Section 4. First Aid Measures**

Routes of Exposure:

If in Eyes | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin | Wash with plenty of soap and water. If skin irritation: get medical advice/attention.
If Swallowed | Rinse mouth. Give copious water to drink. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled | Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

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

**Symptoms:**

**Ingestion:** Harmful if swallowed.

**Skin:** Not applicable.

**Inhalation:** Not applicable.
Section 5. Fire Fighting Measures

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Non Flammable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards from combustion</td>
<td>Oxides of carbon</td>
</tr>
<tr>
<td>products</td>
<td>Oxides of nitrogen</td>
</tr>
<tr>
<td></td>
<td>Toxic gases</td>
</tr>
<tr>
<td>Suitable</td>
<td>Water spray, foam, dry extinguishing</td>
</tr>
<tr>
<td>Extinguishing media</td>
<td>media, carbon dioxide</td>
</tr>
<tr>
<td>Precautions for firefighters</td>
<td>Wear full protection if necessary.</td>
</tr>
<tr>
<td>and special protective</td>
<td>Do not breathe fumes. Protective</td>
</tr>
<tr>
<td>clothing</td>
<td>respirator with independent air supply</td>
</tr>
<tr>
<td></td>
<td>according to size of the fire.</td>
</tr>
</tbody>
</table>

HAZCHEM CODE: 2Z

Section 6. Accidental Release Measures

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel.

Environmental precautions
If leakage occurs, dam up. Resolve leaks if this is possible without risk. Prevent surface and ground water infiltration, as well as ground penetration. Prevent from entering drainage system. If accidental entry into drainage system occurs, inform responsible authorities.

Methods and material for containment and cleaning up
Pick up mechanically and dispose of according to Section 13. Fill the absorbed material into lockable containers. Clean soiled bottles immediately.

Section 7. Handling and Storage

Precautions for Handling:
- Read label before use.
- Ensure good ventilation.
- Avoid build-up of dust.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing.

Precautions for Storage:
- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Keep out of access to unauthorized individuals.
- Store product closed and only in original packaging.
- Not to be stored in gangways or stairwells.
- Under all circumstances prevent penetration into the soil.
- Store at room temperature.
- Store in a dry place.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA ppm</th>
<th>mg/m3</th>
<th>STEL ppm</th>
<th>mg/m3</th>
</tr>
</thead>
</table>

None of the ingredients have workplace exposure limits listed on WES.
Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15-Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

**Engineering Controls**

Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

**Personal Protection Equipment**

<table>
<thead>
<tr>
<th>Eyes</th>
<th>Tight fitting protective goggles with side protection (EN166). If applicable face protection (EN166).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands and Skin</td>
<td>Universal protective gloves (plant protection). Minimum layer thickness in mm = 0.5. Permeation time in minutes = 120. Protective working garments (eg safety shoes and long sleeved protective garments) should be worn.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Normally not necessary. If the general dust limit is exceeded, breathing masks with fine dust filters are necessary (EN143), code colour white. If applicable filter P2 (EN143), code colour white.</td>
</tr>
</tbody>
</table>

**Section 9  Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Cream, white granulate solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Slightly characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>7 (1% CIPAC MT 75.3)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not highly flammable</td>
</tr>
<tr>
<td>Upper and Lower Exposure Limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>719 g/l (CIPAC MT186, (pour density))</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>757 g/l (CIPAC MT186 (tap density))</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>0.85 (21°C OECD 117 (n-octanol/water))</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>396°C</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Particle Characteristics</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Section 10. Stability and Reactivity**

<table>
<thead>
<tr>
<th>Stability of Substance</th>
<th>This product is stable under normal conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions to Avoid</td>
<td>Strong heat and moisture.</td>
</tr>
<tr>
<td>Incompatible Materials</td>
<td>Strong alkalis, oxidizing substances and strong acids.</td>
</tr>
</tbody>
</table>
### Hazardous Decomposition Products

No hazardous decomposition products if stored and handled as prescribed/indicated.

---

### Section 11  Toxicological Information

#### Acute Effects:

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swallowed</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>Dermal</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Eye</td>
<td>Corrosive to ocular tissue</td>
</tr>
<tr>
<td>Skin</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### Chronic Effects:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Aspiration</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>STOT/SE</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>STOT/RE</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study</th>
<th>Result</th>
<th>Classification/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral Toxicity, Rat</td>
<td>LD$_{50}$ &gt; 300 - &lt; 2000 mg/kg bw</td>
<td>GHS Category 4 / S6 Poison</td>
</tr>
<tr>
<td>Acute Dermal Toxicity, Rat</td>
<td>LD$_{50}$ &gt; 2000 mg/kg bw</td>
<td>GHS Category 5 (unclassified) / S5 Poison</td>
</tr>
<tr>
<td>Acute Inhalation Toxicity, Rat</td>
<td>LC$_{50}$ &gt; 5.1 mg/L</td>
<td>GHS Category 5 / S5 Poison</td>
</tr>
<tr>
<td>Acute Skin Irritation/Corrosion, Rabbit</td>
<td>Not irritating</td>
<td>GHS Category 5 (unclassified) / No poisons schedule triggered</td>
</tr>
<tr>
<td>In vitro Acute Eye Irritation, Chicken</td>
<td>Not irritating</td>
<td>GHS Category 5 (unclassified) / No poisons schedule triggered</td>
</tr>
<tr>
<td>LLNA (Skin Sensitisation), Mouse</td>
<td>Non-sensitiser</td>
<td></td>
</tr>
</tbody>
</table>

---

### Section 12.  Ecotoxicological Information

HSNO Classes:

- 9.1B = Toxic to aquatic life with long lasting effects.
- 9.2B = Toxic to the soil environment.
- 9.3C = Harmful to terrestrial vertebrates

#### Bervis 150SG

<table>
<thead>
<tr>
<th>Toxicity/effect</th>
<th>Endpoint / Time/ Value / Unit / Organism</th>
<th>Test Method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>LC$_{50}$ (Oncorhynchus mykiss) = 96hr &gt;100mg/l</td>
<td>OECD203</td>
<td></td>
</tr>
<tr>
<td>Toxicity to daphnia</td>
<td>EC$_{50}$ (daphnia magna) = 48h &gt;100mg/l</td>
<td>OECD202</td>
<td></td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>ErC$_{50}$ (Psuedokirchnerie Ilia subcapitata) = 72h &gt;5.6mg/l</td>
<td>OECD201</td>
<td></td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>EyC$_{50}$ (Psuedokirchnerie Ilia subcapitata) = 72h &gt;1.6mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>n.d.a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>n.d.a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results of PBT and vPvB assessment</td>
<td>n.d.a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>n.d.a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other organisms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ErC50(Lemna gibba) = 72h</td>
<td>OECD221</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.05mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other organisms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EyC50(Lemna gibba) = 72h</td>
<td>OECD221</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.82mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do not allow to enter waterways.

**Section 13. Disposal Considerations**

**Disposal Method:** Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill.

**Precautions:** Do not allow product to enter waterways.

**Disposal methods to avoid:** Do not burn product or container.

**Section 14 Transport Information**

**This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012**

**Road and Rail Transport**

- **UN No:** 3077
- **Class-primary:** 9
- **Packing Group:** III
- **Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METAMITRON)

**Air Transport**

- **UN No:** 3077
- **Class-primary:** 9
- **Packing Group:** III
- **Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METAMITRON)

**Marine Transport**

- **UN No:** 3077
- **Class-primary:** 9
- **Packing Group:** III
- **Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (METAMITRON)

**Special Provisions:**

If the product’s individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

**Section 15 Regulatory Information**

**EPA Approval Code:** HSR101178

**HSNO Classification:** 6.1D (oral), 8.3A, 9.1B, 9.2B, 9.3C

**HSW (HS) Regulations 2017 and EPA Notices**

- **Certified Handler:** Not Required
- **Location Certificate:** Not required

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**Product Name:** Brevis
**Date of SDS:** 18 July 2018
**Issued by:** Technical Compliance Consultants (NZ) Ltd
**Tel:** 64 9 475 5240
**www.techcomp.co.nz**
Tracking Trigger Quantities | Not required
---|---
Signage Trigger Quantities | 1000L(9.1B)
Emergency Response Plan | 1000L(9.1B)
Secondary Containment | 1000L(9.1B)

**HSNO Additional Controls (Restrictions of use)**

Restrictions of Use

- This substance must not be applied into or onto water
- This substance must be applied via ground-based methods only •
- This substance must not be applied at rates exceeding 330 g metamitron/ha, twice per year, with a minimum interval of five days between application
- A buffer zone of 5 m between the application area and any downwind area containing non-target plants must be observed when applying this substance.
- The person in charge of areas treated with this substance must ensure that no person works in contact with the trees treated with the substance until the end of the 3 day re-entry interval.

**Hazardous Property Controls Notice 2017**

- HPC Notice Part 4 Clause 47: Equipment for class 9 substances must be appropriate
- HPC Notice Part 4 Clause 48: Records of application of class 9 pesticides and plant growth regulators
- HPC Notice Part 4 Subpart A: Site and storage controls for class 9 substances

**ACVM Act and Regulations**

- Registered pursuant to the ACVM Act 1997, See www.foodsafety.govt.nz for registration conditions
- No. P009397
- For all further controls: Refer to EPA website (www.epa.govt.nz) for controls document - HSR101178

**Section 16 Other Information**

**Glossary**

- **EC50**: Median effective concentration.
- **EEL**: Environmental Exposure Limit.
- **EPA**: Environmental Protection Authority.
- **HSNO**: Hazardous Substances and New Organisms.
- **LC50**: Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
- **LD50**: Lethal dose to kill 50% of test animals/organisms.
- **LEL**: Lower explosive level.
- **OSHA**: American Occupational Safety and Health Administration.
- **TEL**: Tolerable Exposure Limit.
- **TLV**: Threshold Limit Value—an exposure limit set by responsible authority.
- **UEL**: Upper Explosive Level.
- **WES**: Workplace Exposure Limit.

**References:**

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
5. HSW (Hazardous Substances) Regulations 2017
Disclaimer

This document has been issued by TCC (NZ) Ltd and serves as their Safety Data Sheet (‘SDS’). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

The information herein is given in good faith, but no warranty, express or implied is made. Please contact the New Zealand distributor, if further information is required.

Issue Date: 18 July 2018
Review Date: 18 July 2023