SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
Eclipse™ Extreme

Recommended use
Fire extinguishing agent.

Uses advised against
No information available.

Supplier
Sandvik Mining Australia
Daws Road Melrose Park
Adelaide South Australia
email: firesuppressionsales@sandvik.com

Emergency telephone number
NSW Poisons Information Centre
Telephone number: 131126 (available 24/7)

2. HAZARDS IDENTIFICATION

GHS Classification
Not classified.

GHS Label elements, including precautionary statements

Signal Word
Not applicable.

Hazard Statements
Not applicable.

Precautionary Statements
Not applicable.

Environmental hazard
Contains no substances known to be hazardous for the environment. See Section 12 for additional Ecological Information.

Hazards Not Otherwise Classified (HNOC)
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium acetate</td>
<td>127-08-2</td>
<td>&gt;45</td>
</tr>
<tr>
<td>Hydrotrope</td>
<td>PROPRIETARY</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Fluorosurfactant</td>
<td>PROPRIETARY</td>
<td>&lt;1</td>
</tr>
<tr>
<td>D-glucopyranose, oligomers, decyl octyl glycosides</td>
<td>68515-73-1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>112-34-5</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

General advice
No hazards which require special first aid measures.

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately if symptoms occur.

Skin contact
Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

Ingestion
Clean mouth with water and afterwards drink plenty of water. Get medical attention immediately if symptoms occur.

Inhalation
Move victim to fresh air. Get medical attention immediately if symptoms occur.

Main symptoms
If inhaled: Coughing and/or wheezing. If in eyes: May cause redness and tearing. If on skin: Redness.

Notes to physician
Treat symptomatically.

Protection of first-aiders
Use personal protective equipment. Avoid contact with skin, eyes and clothing.

5. FIRE FIGHTING MEASURES

Flammable properties
Not flammable.

Flash point
Not applicable.

Autoignition temperature
Not applicable.

Suitable Extinguishing Media
The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
None known.

Special Hazard
Thermal decomposition can lead to release of irritating and toxic gases and vapours (Carbon monoxide (CO), Carbon dioxide (CO₂), Metal oxides, Nitrogen oxides (NOₓ)).

Protection Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus and protective suit.

Fire fighting measures
Dilute toxic gases with water spray.

Sensitivity to Mechanical Impact
None.

Sensitivity to Static Discharge
None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Ensure adequate ventilation. Avoid contact with skin, eyes and inhalation of vapours. Dispose of in accordance with local regulations.

Environmental precautions
Should not be released into the environment.

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect in closed and suitable containers for disposal.
7. HANDLING AND STORAGE

Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Keep in a dry, cool and well-ventilated place. Keep away from: Strong acids, Strong oxidising agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits
Contains no substances with occupational exposure limit values.

Biological monitoring
No information available.

Context and limitations of control banding
No information available.

Recommended monitoring procedures
No information available.

Appropriate engineering controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment
Eye protection
Safety glasses with side-shields.

Hand Protection
Nitrile rubber (NBR): > 0.4 mm. Break through time: >8h.

Skin and body protection
Long sleeved clothing.

Respiratory protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators: Half mask.

Recommended Filter Type
A

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls
The product should not be allowed to enter drains, water courses or the soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state @20°C
Liquid (Crystalline Powder when shipped)

Appearance
Foam

Colour
Clear

Odour
Odourless

pH
8.95

Melting/freezing point
Not applicable

Boiling point/boiling range
Not applicable

Flash point
Not applicable.

Evaporation rate
No information available

Flammability (solid, gas)
Not information available

Flammability Limits in Air
Not flammable

Vapour pressure
<10mmHg (@20 °C)

Vapour density
No information available

Relative density
No information available

Solubility
Water solubility
Soluble

Partition Coefficient
(n-octanol/water)
No information available

Autoignition temperature
Not applicable.
10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.

Hazardous Reactions
None known.

Conditions to Avoid
No information available.

Materials to Avoid
Strong acids. Strong oxidising agents.

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapours (Carbon monoxide (CO), Carbon dioxide (CO$_2$), Metal oxides, Nitrogen oxides (NO$_x$)).

Reactivity
Not reactive under recommended storage and handling conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium acetate</td>
<td>3250 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>3384 mg/kg (Rat)</td>
<td>2700 mg/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
No known effect.

Serious eye damage/irritation
No known effect.

Respiratory or skin sensitisation
No known effect.

Germ cell mutagenicity
Not known to cause heritable genetic damage.

Carcinogenicity
Contains no ingredient listed as a carcinogen.

Reproductive toxicity
Not known to cause birth defects or have a deleterious effect on a developing fetus. Not known to adversely affect reproductive functions and organs.

STOT-single exposure
No known effect.

STOT-repeated exposure
No known effect.

Aspiration hazard
No known effect.

Routes of Exposure
No information available.

Most important symptoms/effects, acute and delayed
If inhaled: Coughing and/or wheezing. If in eyes: May cause redness and tearing. If on skin: Redness.
## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects
Contains no substances known to be hazardous for the environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>EC50: &gt;100 mg/L</td>
<td>LC50: 1300 mg/L</td>
<td></td>
<td>EC50: 2850 mg/L</td>
</tr>
<tr>
<td></td>
<td>Desmodesmus subspicatus 96 h</td>
<td>Lepomis macrochirus 96 h static</td>
<td></td>
<td>Daphnia magna 24 h</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EC50: &gt;100 mg/L</td>
</tr>
<tr>
<td>Potassium acetate</td>
<td>EC50: &gt;1000 mg/L</td>
<td>LC50: &gt;992.7 mg/L</td>
<td></td>
<td>EC50: &gt;919 mg/L</td>
</tr>
<tr>
<td></td>
<td>72h Skeletonema costatum</td>
<td>96h static Danio rerio</td>
<td></td>
<td>Daphnia magna 48 h</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No information available.

**Bioaccumulative potential**
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log P ow</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium acetate</td>
<td>-3.72</td>
<td></td>
</tr>
</tbody>
</table>

**Mobility in soil**
No information available.

**Other adverse effects**
No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**
Dispose of in accordance with local regulations.

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

According to: ADG Code, ADR, RID, ADN, IMDG, IATA/ICAO.

**UN Number**
Not regulated.

**Proper shipping name**
Not regulated.

**Hazard class**
Not regulated.

**Hazard class**
Not regulated.

**Packing Group**
Not regulated.

**Packaging group**
Not regulated.

**Environmental hazards**
Contains no substances known to be hazardous for the environment.

**Special precautions for user**
Not applicable.

**Transport in bulk according to Annex II of MARPOL and the IBC Code**
Not applicable.

**HAZCHEM Emergency Action Code**
No information available.
15. REGULATORY INFORMATION

National regulatory information
No information available.

International Regulations
No information available.

16. OTHER INFORMATION

Revision Note
Not applicable.

Training Advice
Workers must be trained in the proper use and handling of this product as required under applicable regulations.

Abbreviations and acronyms
- STOT: Specific Target Organ Toxicity
- ADG Code: Australian Dangerous Goods Code
- ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations for the International Transport of Dangerous Goods by Rail)
- ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
- IMDG: International Maritime Dangerous Goods Code
- ICAO: International Civil Aviation Organization

This safety data sheet complies with the Work Health and Safety Regulations and is based on the Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice

SDS No.
SV00002

Disclaimer
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 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 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

End of Safety Data Sheet