SAFETY DATA SHEET

Revision Date 26/06/2017 **Version** 2
Date of the previous version 04/05/2016 EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name **Eclipse™ Extreme**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Fire extinguishing agent.
Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

UK National Health Service (NHS) call 111 or, in life-threatening emergencies, call 999

WAL National Health Service (NHS) call 0845 46 47

IE National Poisons Information Centre
+353 1 809 2566 or +353 1 837 9964 (only for healthcare professionals)

UK National Chemical Emergency Centre (NCEC):

For Europe and if no country-specific number listed: +44 1866 407 333
For Brazil: +55 11 3197 5891
For US: +1 202 464 2554
For Mexico: +52 55 5004 8763
For Africa: +27 21 300 2732
For Australia: +61 2 8014 4558
For NZ: +649 929 1483
For China (mainland): +86 532 8388 9090
For China (outside): +85 512 8090 3041
(24 hours per day/7 days per week)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1272/2008/EC)

Not classified.

2.2. Label elements

None.

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	EC-No	CAS-No	Weight %	Classification (1272/2008/EC)	REACH Registration Number
Potassium acetate	204-822-2	127-08-2	>45	NC	01-2119486975-16
Hydrotrope	-	PROPRIETARY	<1	Skin Irr. 2 H315 Eye Irr. 2 H319	No data available
Flourosurfactant	-	PROPRIETARY	<1	Flam. liquids 3 H226 Eye Irr. 2A H319	No data available
D-glucopyranose, oligomers, decyl octyl glycosides	500-220-1	68515-73-1	<1	Eye Dam. 1 H318	01-2119488530-36
2-(2-butoxyethoxy)ethanol	203-961-6	112-34-5	<1	Eye Irr. 2 H319	01-2119475104-44

For the full text of the H-Statements mentioned in this section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of 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.

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

4.2. Most important symptoms and effects, both acute and delayed

Main symptoms If inhaled: Coughing and/or wheezing. If in eyes: Pain. If on skin. Redness.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

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.

5.2. Special hazards arising from the substance or mixture

Special Hazard Thermal decomposition can lead to release of irritating and toxic gases and vapours (Carbon monoxide (CO), Carbon dioxide (CO_2), Metal oxides).

5.3. Advice for firefighters

Fire fighting measures Dilute toxic gases with water spray.

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Should not be released into the environment.

6.3 Methods and material for containment and 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.

6.4. Reference to other sections

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

7.2. 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.

7.3. Specific end use(s)

Exposure scenario Not available.

Other information Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
2-(2-butoxyethoxy)ethanol	TWA: 67.5 mg/m³	STEL: 15 ppm STEL: 101.2 mg/m³ TWA: 10 ppm TWA: 67.5 mg/m³	TWA: 10 ppm TWA: 67.5 mg/m³ STEL: 15 ppm STEL: 101.2 mg/m³	VLA-ED: 67.5 mg/m³ VLA-EC: 101.2 mg/m³	MAK: 67 mg/m³ TWA: 100 mg/m³

Chemical Name	Italy	Portugal	Netherlands	Denmark	Poland
2-(2-butoxyethoxy)ethanol	TWA: 67,5 mg/m³ STEL: 101,2 mg/m³		WG: 50 mg/m³ STEL: 100 mg/m³	TWA: 100 mg/m³ STEL: 200 mg/m³	NDS: 67 mg/m³ NDSCh: 100 mg/m³

Chemical Name	Belgium	Sweden	Hungary	Finland	Czech Republic
2-(2-butoxyethoxy)ethanol	TWA: 67.5 mg/m³ STEL: 101.2 mg/m³	TWA: 100 mg/m³ STV: 200 mg/m³	TWA: 67.5 mg/m³ STEL: 101.2 mg/m³	TWA: 68 mg/m³ TWA: 10 ppm	

Recommended monitoring procedures No information available.

Derived No Effect Level (DNEL)

Chemical Name	Worker - inhalative, long-term - local	Worker - dermal, long-term - local	Worker - inhalative, short-term - local	Worker - dermal, short-term - local
2-(2-butoxyethoxy)ethanol	67.5 mg/m³		101.2 mg/m³	

Chemical Name	Worker - inhalative, long-term - systemic	Worker - dermal, long-term - systemic	Worker - inhalative, short-term - systemic	Worker - dermal, short-term - systemic
2-(2-butoxyethoxy)ethanol	67.5 mg/m³	83 mg/kg bw/day		
Potassium acetate	1265.65 mg/m³	14.36 mg/kg bw/d	1265.65 mg/m³	86.14 mg/kg bw/d

Predicted No Effect Concentration (PNEC)

Chemical Name	Freshwater	Marine water	Intermittent release	Sewage treatment plant	Freshwater sediment	Marine sediment	Soil	Oral
2-(2-butoxyethoxy)ethanol	1.1 mg/L	0.11 mg/L		200 mg/L	4.4 mg/kg sediment dw	0.44 mg/kg sediment dw	0.32 mg/kg soil dw	56 mg/kg food
Potassium acetate	0.46 mg/L	0.046 mg/L		0.862 g/L	0.00185 mg/kg	0.000185 mg/kg	0.00185 mg/kg	

8.2. Exposure controls

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic 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)	No information available
Flammability Limits in Air	Not flammable
Vapour pressure	<10mm Hg (@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
Decomposition temperature	<100 °C
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidising properties	No information available

9.2 Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not reactive under recommended storage and handling conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Strong acids. Strong oxidising agents.

10.6. 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).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Ingestion No known effect.
Skin contact No known effect.
Inhalation No known effect.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-(2-butoxyethoxy)ethanol	3384 mg/kg (Rat)	2700 mg/kg (Rabbit)	
Potassium acetate	3250 mg/kg (Rat)		

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.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical Name	Log P_{ow}	Bioconcentration factor (BCF)
Potassium acetate	-3.72	

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products Dispose of in accordance with local regulations.

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

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number

Not regulated.

14.2. UN proper shipping name

Not regulated.

14.3. Transport hazard class(es)

Not regulated.

14.4. Packing group

Not regulated.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions on use None.

Other Regulations None.

15.2 Chemical safety assessment

Not required.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H226 - Flammable liquid and vapour

Revision Note Format updated in compliance with European REACH and CLP regulations.

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

Abbreviations and acronyms
EC: European Commission
REACH: Registration, Evaluation, Authorisation and Restriction of Chemical substances
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
STOT: Specific Target Organ Toxicity
PBT: Persistent, Bioaccumulative, Toxic
vPvB: very Persistent and very Bioaccumulating
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

SDS No. SV00002

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End of Safety Data Sheet