



SAFETY DATA SHEET

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 17/10/2018
Date of the previous version 26/06/2017

Version 3
EU EN

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

1.1. Product identifier

Product Name Eclipse™ Sustain

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

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)

Serious eye damage/eye irritation

Category 2 - H319

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

2.2 Label elements

**Signal word**

Warning

Hazard Statements

H319 - Causes serious eye irritation

Precautionary Statements

P264 - Wash hands thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

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
Sodium Octyl Sulfate	205-535-5	142-31-4	<3	Flam. Solid 1 H228 Skin Irr. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335	01-2119966154-35
Proprietary mix of hydrocarbon surfactants, sucrose, polysaccharide gum and water	-	-	>86	-	No data available
Alky polyglycoside	603-654-0	132778-08-6	>3	Eye Dam. 1 H318	No data available
2-(2-butoxyethoxy)ethanol	203-961-6	112-34-5	>1	Eye Irr. 2 H319	01-2119475104-44
1-propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-coco acyl derivs., hydroxides, inner salts	268-761-3	68139-30-0	<3	Eye Irr. 2 H319	No data available

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 irritation persists.

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention immediately if irritation persists.

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: May cause redness and tearing. If on skin: Redness.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically.
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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.
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Unsuitable Extinguishing Media	None known.
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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: Nitrogen oxides (NO _x), Carbon monoxide (CO), Carbon dioxide (CO ₂), Sulphur dioxides (SO ₂), Metal oxides.
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5.3. Advice for firefighters

Fire fighting measures	Fire may produce irritating and/or toxic gases, Dilute with plenty of water.
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Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with eyes. Keep away from heat, sparks and flame. 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 heat. Keep at temperatures between -30 and 49 °C.

7.3. Specific end use(s)

Exposure scenario Not available.

Other information Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Exposure Limits**

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
2-(2-butoxyethoxy)ethanol	TWA: 67.5 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	VLA-ED: 67.5 mg/m ³ VLA-EC: 101.2 mg/m ³	MAK: 67 mg/m ³ TWA: 100 mg/m ³

Chemical Name	Italy	Portugal	Netherlands	Denmark	Poland
2-(2-butoxyethoxy)ethanol	TWA: 67,5 mg/m ³ STEL: 101,2 mg/m ³		WG: 50 mg/m ³ STEL: 100 mg/m ³	TWA: 100 mg/m ³ STEL: 200 mg/m ³	NDS: 67 mg/m ³ NDSCh: 100 mg/m ³

Chemical Name	Belgium	Sweden	Hungary	Finland	Czech Republic
2-(2-butoxyethoxy)ethanol	TWA: 67.5 mg/m ³ STEL: 101.2 mg/m ³	TWA: 100 mg/m ³ STV: 200 mg/m ³	TWA: 67.5 mg/m ³ STEL: 101.2 mg/m ³	TWA: 68 mg/m ³ 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/m ³		101.2 mg/m ³	

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/m ³	83 mg/kg bw/day		
Sodium Octyl Sulfate	285 mg/m ³	4 060 mg/kg bw/day		

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
Sodium Octyl Sulfate	0.136 mg/L	0.014 mg/L		1.35 mg/L	1.5 mg/kg sediment dw	0.15 mg/kg sediment dw	0.22 mg/kg soil dw	

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	Neoprene, Polyvinyl chloride (PVC), Butyl rubber, > 0.5 mm; 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: Face 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
Appearance	Foam
Colour	Yellow / Amber
Odour	Pleasant
pH	7 - 8.5
Melting/freezing point	0 °C
Boiling point/boiling range	No information available
Flash point	Not applicable.
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limits in Air	Not applicable
Explosive limits	Not applicable
Vapour pressure	24 hPa (@20°C)
Vapour density	No information available
Relative density	1.02
Solubility	
Water solubility	Soluble
Partition Coefficient (n-octanol/water)	Not Applicable
Autoignition temperature	Not applicable.
Decomposition temperature	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidising properties	No information available

9.2 Other information

Critical temperature	>60 °C
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not applicable.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat and sources of ignition.

10.5. Incompatible materials

None in particular

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of toxic and corrosive gases/vapours: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Sulphur dioxides (SO₂), 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)	
Sodium Octyl Sulfate	3200 mg/kg (Rat)		

Skin corrosion/irritation No known effect.

Serious eye damage/irritation Causes eye irritation.

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

Contains no substances known to be hazardous for the environment.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2-(2-butoxyethoxy)ethanol	100: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	1300: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static		100: 48 h <i>Daphnia magna</i> mg/L EC50 2850: 24 h <i>Daphnia magna</i> mg/L EC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not applicable.

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

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 available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions on use	None.
Europe	
EU - REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	Not listed
EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	Not listed
EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern for Authorisation	Not listed
EU - REACH (1907/2006) - Potential Substances of Very High Concern	Not listed
EU - Seveso III Directive (2012/18/EC) - Qualifying Quantities of Dangerous Substances - Lower-Tier Requirements	Not listed
EU - Seveso III Directive (2012/18/EC) - Qualifying Quantities of Dangerous Substances - Higher-Tier Requirements	Not listed
EU - Ozone Depleting Substances Regulations (2037/2000/EC)	Not listed
National regulatory information	Not listed
International legislation/requirements	
Chemical Weapon Convention List Schedules I, II and III Chemicals	Not listed
Montreal Protocol (Annexes A, B, C, E)	Not listed
Stockholm Convention on Persistent Organic Pollutants	Not listed

15.2 Chemical safety assessment

Not required.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3	H228 - Flammable solid H315 - Causes skin irritation H318 - Causes serious eye damage H319 - Causes serious eye irritation H335 - May cause respiratory irritation
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.	SV00001 /CLP

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No.

1272/2008.

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