



## BIOPOWER

Version 9 / IRL  
10200013441

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Revision Date: 09.08.2018  
Print Date: 05.09.2018

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

#### 1.1 Product identifier

Trade name                                BIOPOWER  
Product code (UVP)                      05815990

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

Use    Adjuvant

#### 1.3 Details of the supplier of the safety data sheet

Supplier                                    Bayer CropScience Ltd  
   Bayer Ltd  
   The Atrium, Blackthorn Road  
   Sandyford  
   Dublin 18  
   Ireland

Telephone                                 +353-1-2999313

Responsible Department                Email: [ukinfo@bayercropscience.com](mailto:ukinfo@bayercropscience.com)

#### 1.4 Emergency telephone no.

Emergency telephone no.              00800 1020 3333 (24 hr)

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### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Skin irritation: Category 2

H315                                Causes skin irritation.

Eye irritation: Category 2

H319                                Causes serious eye irritation.

Chronic aquatic toxicity: Category 3

H412                                Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

**|| Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

**|| Hazard label for supply/use required.**

**Hazardous components which must be listed on the label:**

- Alkylethersulfate, sodium salt

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H315	Causes skin irritation.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
EUH208	Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

**Precautionary statements**

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
P391	Collect spillage.
P501	Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site, except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

**2.3 Other hazards**

No other hazards known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**Soluble concentrate (SL)  
Alkylethersulfate, sodium salt 276,5 g/l**Hazardous components**

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Alkylethersulfate, sodium salt	68891-38-3 500-234-8 01-2119488639-16-XXXX	Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Chronic 3, H412	27
1,2-Benzisothiazol-3(2H)-one	2634-33-5 220-120-9	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Eye Dam. 1, H318	> 0.005 – < 0.05

**Further information**

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



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**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

<b>General advice</b>	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
<b>Inhalation</b>	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Call a physician or poison control center immediately.

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

**Symptoms** No symptoms known or expected.

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

**Treatment** Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

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**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture** In the event of fire the following may be released: Carbon monoxide (CO), Sulphur oxides

**5.3 Advice for firefighters**

**Special protective equipment for firefighters** In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**Further information** Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

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### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

**Precautions** Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.

#### **6.3 Methods and materials for containment and cleaning up**

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

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### **SECTION 7: HANDLING AND STORAGE**

#### **7.1 Precautions for safe handling**

**Advice on safe handling** No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.

**Advice on protection against fire and explosion** Keep away from heat and sources of ignition.

**Hygiene measures** Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

#### **7.2 Conditions for safe storage, including any incompatibilities**

**Requirements for storage areas and containers** Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Protect from freezing. Keep away from direct sunlight.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs.

**7.3 Specific end use(s)** Refer to the label and/or leaflet.

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### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 Control parameters**

No known occupational limit values.

#### **8.2 Exposure controls**

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In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Respiratory protection**

Respiratory protection is not required under anticipated circumstances of exposure.  
Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

**Hand protection**

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Protective index	Class 6
Directive	Protective gloves complying with EN 374.

**Eye protection**

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

**Skin and body protection**

Wear standard coveralls and Category 3 Type 6 suit.  
If there is a risk of significant exposure, consider a higher protective type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Form</b>	Liquid, slightly turbid
<b>Colour</b>	colourless
<b>Odour</b>	slightly acidic
<b>pH</b>	4.0 - 7.0 at 100 % (23 °C)
<b>Flash point</b>	> 100 °C No flash point - Determination conducted up to the boiling point.
<b>Density</b>	ca. 1.03 g/cm <sup>3</sup> at 20 °C

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<b>Water solubility</b>	miscible in all proportions
<b>Partition coefficient: n-octanol/water</b>	Alkylethersulfate, sodium salt: log Pow: 0.3
<b>Viscosity, dynamic</b>	<= 300 mPa.s at 20 °C
<b>Surface tension</b>	27 mN/m at 25 °C
<b>9.2 Other information</b>	Further safety related physical-chemical data are not known.

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**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity****Thermal decomposition** Stable under normal conditions.**10.2 Chemical stability** Stable under recommended storage conditions.**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.**10.4 Conditions to avoid** Extremes of temperature and direct sunlight.**10.5 Incompatible materials** Store only in the original container.**10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.

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**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Acute oral toxicity** ATE (Mix) > 2,000 mg/kg  
Calculation method  
Acute toxicity estimate**Acute inhalation toxicity** During intended and foreseen applications, no respirable aerosol is formed.**Acute dermal toxicity** ATE (Mix) 2,000 mg/kg  
Calculation method**Skin corrosion/irritation** Irritating to skin. (Rabbit)  
Information refers to the main component.**Serious eye damage/eye irritation** Irritating to eyes. (Rabbit)  
Test conducted with a similar formulation.**Respiratory or skin sensitisation** Non-sensitizing. (Guinea pig)  
OECD Test Guideline 406, Magnusson & Kligman test  
Information refers to the main component.**Assessment STOT Specific target organ toxicity – single exposure**

Alkylethersulfate, sodium salt: Based on available data, the classification criteria are not met.

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Alkylethersulfate, sodium salt did not cause specific target organ toxicity in experimental animal studies.

**Assessment mutagenicity**

Alkylethersulfate, sodium salt was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Alkylethersulfate, sodium salt was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

Alkylethersulfate, sodium salt did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

Alkylethersulfate, sodium salt did not cause developmental toxicity in rats and rabbits.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

<b>Toxicity to fish</b>	LC50 (Danio rerio (Zebra fish)) 7.1 mg/l Exposure time: 96 h Information refers to the main component.
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) 7.2 mg/l Exposure time: 48 h Information refers to the main component.
<b>Toxicity to aquatic plants</b>	NOEC (Desmodesmus subspicatus (green algae)) 0.93 mg/l Exposure time: 72 h Information refers to the main component.  EC50 (Desmodesmus subspicatus (green algae)) 27 mg/l Exposure time: 72 h Information refers to the main component.

**12.2 Persistence and degradability**

<b>Biodegradability</b>	Alkylethersulfate, sodium salt: rapidly biodegradable
<b>Koc</b>	Alkylethersulfate, sodium salt: No data available

**12.3 Bioaccumulative potential**

<b>Bioaccumulation</b>	Alkylethersulfate, sodium salt: Does not bioaccumulate.
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**12.4 Mobility in soil**

<b>Mobility in soil</b>	Alkylethersulfate, sodium salt: soluble in water
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**12.5 Results of PBT and vPvB assessment**

<b>PBT and vPvB assessment</b>	Alkylethersulfate, sodium salt: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not
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considered to be very persistent and very bioaccumulative (vPvB).

### 12.6 Other adverse effects

**Additional ecological information** No other effects to be mentioned.

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## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product** It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.

**Contaminated packaging** Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times.  
Add washings to sprayer at time of filling.  
Dispose of empty and cleaned packaging safely.  
Follow advice on product label and/or leaflet.

**Waste key for the unused product** **02 01 08\*** agrochemical waste containing hazardous substances

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## SECTION 14: TRANSPORT INFORMATION

**According to ADN/ADR/RID/IMDG/IATA not classified as dangerous goods.**

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

**14.1 – 14.5** Not applicable.

### 14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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

No transport in bulk according to the IBC Code.

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## SECTION 15: REGULATORY INFORMATION

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

#### Republic of Ireland Regulations

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

#### Supply and Use

European Communities (Prohibition of Certain Active Substances in Plant Protection Products) Regulations 1981 (SI No 320/1981)



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European Communities (Authorization, Placing on the Market, Use and Control of Plant Protection Products) Regulations 2003 (SI No 83/2003)  
European Communities (Classification, Packaging and Labelling of Plant Protection Products and Biocide Products) Regulations 2001 (SI No 624/2001)  
2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (SI No 619/2001)

**Waste Treatment**

Landfill Directive  
Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

**Further information**

WHO-classification: III (Slightly hazardous)

**15.2 Chemical safety assessment**

A chemical safety assessment is not required.

**SECTION 16: OTHER INFORMATION****Text of the hazard statements mentioned in Section 3**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

**Abbreviations and acronyms**

Conc.	Concentration
LOEC/LOEL	Lowest observed effect concentration/level
UN	United Nations
OECD	Organization for Economic Co-operation and Development
EN	European Standard
ELV	Exposure Limit Value
N.O.S.	Not otherwise specified
SI	Statutory Instrument
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
EU	European Union
ELINCS	European list of notified chemical substances
EINECS	European inventory of existing commercial substances
EC-No.	European community number
NOEC/NOEL	No observed effect concentration/level
LDx	Lethal dose to x %
LCx	Lethal concentration to x %
ICx	Inhibition concentration to x %
ECx	Effective concentration to x %
CAS-Nr.	Chemical Abstracts Service number
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association



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ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
WHO	World health organisation
ATE	Acute toxicity estimate
TWA	Time weighted average

**Reason for Revision:** Safety Data Sheet according to Regulation (EU) No. 2015/830. The following sections have been revised: Section 2: Hazards Identification.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.