

Safety Data Sheet

LignoBond DD

Replaces date: 26/02/2020

Revision date: 18/10/2022

Version: 1.5.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: LignoBond DD

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

Inadvisable uses: None.

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Borregaard AS
Address: P.O. Box 162
City: 1701 Sarpsborg
Country: NORWAY
E-mail: sds@borregaard.com
Phone: + 47 69 11 80 00
Fax: + 47 69 11 87 70

1.4. Emergency Telephone Number

Members of the public: 111 (NHS 111 (Scotland: NHS 24)).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: The product shall not be classified as hazardous according to the classification and labeling rules for substance and mixtures.

2.2. Label elements

Contains

Substance: Calcium lignosulfonate;

2.3. Other hazards

May form explosible dust-air mixture if dispersed.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No./ EC No./ REACH Reg. No.	Concentration	Notes	CLP-classification
Calcium lignosulfonate	8061-52-7	≥ 93 %		
Water	7732-18-5 231-791-2	≤ 7 %		

Please see section 16 for the full text of H- / EUH-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

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Inhalation:	Seek fresh air, wash out mouth with water and blow nose thoroughly.
Ingestion:	Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of discomfort.
Skin contact:	Wash the skin with water.
Eye contact:	Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

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

None.

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

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with powder, foam, carbon dioxide or water mist.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Can generate harmful flue gases containing carbon monoxide in the event of fire.

5.3. Advice for firefighters

If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid formation of dust. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment.

6.2. Environmental precautions

Do not discharge large quantities of concentrated spills and residue into drains.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers.

6.4. Reference to other sections

See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid formation of dust. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment. Do not sweep - use vacuum cleaner to collect spillage.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry, cool, well-ventilated area.

7.3. Specific end use(s)

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None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Substance name	Time period	ppm	mg/m ³	fiber/cm ³	Remarks	Comments
Nuisance dust, total	8h	0	10			

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection: Wear safety goggles if there is a risk of dust contact with eyes.

Personal protective equipment, skin protection: Wear suitable protective clothing.

Personal protective equipment, hand protection: No specific hand protection noted, but gloves may still be advisable.

Personal protective equipment, respiratory protection: In case of insufficient ventilation, wear respiratory protective equipment with P2 filter.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Powder
Colour	Brown
Odour	Weak
Solubility	Solubility in water: Highly soluble

Parameter	Value/unit	Remarks
Odour threshold	ppm	Data not available
Melting point	> 130 °C	
Freezing point	°C	Data not available
Initial boiling point and boiling range	°C	Not applicable. The product is a solid.
Flammability (solid, gas)		Not flammable, but combustible.
Flammability limits		Not flammable, but combustible.
Explosion limits	vol%	Not applicable. The product is a solid.
Flash Point	°C	Not applicable. The product is a solid.
Auto-ignition temperature	> 150 °C	Not applicable. The product is a solid.
Decomposition temperature	°C	Data not available
pH (solution for use)	3.5 - 5.5	10% solution
pH (concentrate)	No data	
Kinematic viscosity	cSt	Not applicable. The product is a solid.
Viscosity	cSt	Not applicable. The product is a solid.
Partition coefficient n-octanol/water	-2.2 - -1.6	
Vapour pressure	No data	
Density	~ 550 kg/m ³	Bulk density
Relative density	No data	
Vapour density	No data	

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Relative density (sat. air)	kPa	Not applicable. The product is a solid.
Particle characteristics	0.050 - 0.080	mm

9.2. Other information

Parameter	Value/unit	Remarks
Explosive properties		Non-explosive
Oxidising properties		Non-oxidising.

Other Information: May form explosible dust-air mixture if dispersed.

MIE: 0.2 J
MITdc: 440 °C
Kst: 159 m*bar/s
Pmax: 8.4 bar
ST class: 1

SECTION 10: Stability and reactivity

10.1. Reactivity

Not reactive.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - oral

LignoBond DD

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
OECD 401 (LD 50) rotte	LD50		> 15000 mg/kg			

Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - dermal: Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - inhalation: Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation: Based on existing data, the classification criteria are deemed not to have been met.

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Serious eye damage/eye irritation:

Based on existing data, the classification criteria are deemed not to have been met.

Respiratory sensitisation or skin sensitisation:

Based on existing data, the classification criteria are deemed not to have been met.

11.2. Information on other hazards

Endocrine disrupting properties:

None known.

SECTION 12: Ecological information

12.1. Toxicity

No effect on the environment.

12.2. Persistence and degradability

According to OECD 302 B, the product is classified as inherently biodegradable.

12.3. Bioaccumulative potential

No bioaccumulation expected.

12.4. Mobility in soil

Solubility in water: Complete

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not discharge large quantities of concentrated spills and residue into drains.

SECTION 14: Transport information

14.1. UN number or ID number: Not applicable.

14.2. UN proper shipping name: Not applicable.

14.3. Transport hazard class(es): Not applicable.

14.4. Packing group: Not applicable.

14.5. Environmental hazards: Not applicable.

14.6. Special precautions for user

None.

14.7. Maritime transport in bulk according to IMO instruments

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Not applicable.

SECTION 15: Regulatory information

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

Special Provisions: ADR/RID. REACH (EC 1907/2006) GHS/CLP (EC NO1272/2008) GHS USA June, 2015.

15.2. Chemical Safety Assessment

Other Information: The product does not have to be classified.

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
1.5.0	18/10/2022	Borregaard AS	Section 6, 7, 8, 9, 11, 12
1.4.0	26/02/2020	Borregaard AS	General review
1.3.0	07/05/2018	Borregaard AS	Section 1
1.2.0	14/08/2017	Borregaard AS	General review
1.1.0	26/06/2015	Borregaard AS	NIHA

Vendor notes:

Information given in this safety data sheet is in accordance with our information, and to the best of our knowledge, was correct on the last revision date. Information given is intended to present guidelines for safe handling, use, processing, storage, transport, disposal and discharge; it is not intended to be a guarantee or quality specification. It is the responsibility of the recipient of this safety data sheet to ensure that information given here is read and understood by all who use, handle, dispose of or in any way come in contact with the product.

Classification method: ADR/RID (2017), GHS / CLP (EC NO1272/2008)

Country: GB



SAFETY DATA SHEET

Forrex FF

SECTION 1: Identification of the substance / mixture and of the company / undertaking

SDS date 2020-01-17
SDS Version 1.0

1.1. Product identifier

Product name Forrex FF

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

Use of the substance/mixture Appliance protection.
Use of the substance/mixture (REACH) Uses advised against.

1.3. Details of the supplier of the safety data sheet

Producer

Company name Dafo Fire Vehicle Protection AB
Office address Vindkraftsvägen 8
Postal address Box 683
Postcode S-13526
City Tyresö
Country Sweden
Tel + 46 10 1768 100
E-mail support@dafo-vehicle.com
Website <http://www.dafo-vehicle.com>

1.4. Emergency telephone number

NCEC CareChem24: +44 1273 289451
Identification, comments Additional Emergency Phone Number in Section 16

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP)

2.2. Label elements

Hazard Pictogram(s)	Not Applicable
Signal Word	Not Applicable
Hazard Statements(s)	Not Applicable
Safety Statements(s)	General: -
	Prevention: -
	Response: -
	Storage: -
	Disposal: -

2.3. Other hazards

Additional Labelling

Safety data sheet available on request.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance:	Identification:	Classification:	% w/w:	Note:
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS no.: 112-34-5 EC no.: 203-961-6 REACH No.: Index No.: 603-096-00-8	Eye Irrit. 2; H319;	1 – 3 %	Annex XVII, EU
1-Propanaminum, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	CAS no.: EC no.: 939-455-3 RECH No.: 01-2119970722-34-0000 Index No.:	Eye Dam. 1;H318 Aquatic Chronic 3; H412	< 1%	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other Information

EU: European occupation exposure limit

Annex XVII: The chemical substance is subject to REACH restrictions, REACH annex XVII.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured persons condition or if the symptoms persist. Never give an unconscious person water or other drink.
Inhalation	Bring the person into fresh air and stay with them.
Skin contact	Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.
Eye contact	Remove contact lenses and open widely. Flush eyes with water or saline water (20-30°C) for at least 5 minutes. Seek medical assistance and continue flushing during transportation.
Ingestion	Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.
Burns	Not Applicable.

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

No Special.

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

No Special.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

This product is not flammable.

5.2. Special hazards arising from the substance or mixture

None.

5.3. Advice for firefighters

Fire fighters should wear appropriate personal protective equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

No specific requirements.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste.

See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.

See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container.

Storage temperature Dry, cool and well ventilated (< 55°C)

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

Long term exposure limit (8 hours): 10 ppm

Long term exposure limit (8 hours): 67,5 mg/m³

Short term exposure limit (15 minutes): 15 ppm

Short term exposure limit (15 minutes): 101,2 mg/m³

The Control of Substances Hazardous to Health Regulations 2002- SI 2002/2677 The Stationery Office 2002.

DNEL

Substance	DNEL	Route of Exposure	Duration	Source	Remarks
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	5 mg/kg	Oral	Long term – Systemic effects – General Population		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	68 mg/m ³	Inhalation	Long term – Systemic effects - Workers		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	10 ppm	Inhalation	Long term – Systemic effects – Workers		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	101,2 mg/m ³	Inhalation	Short term – Local effects - Workers		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	60,7 mg/m ³	Inhalation	Short term – Local effects – General Population		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	83 mg/kg	Dermal	Long term – Systemic effects – Workers		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	50 mg/kg	Dermal	Long term – Systemic effects – General population		
1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8- 18(even numbered) acyl) derivs., hydroxides, inner salts	0,17 mg/kg	Oral	Long term – Systemic effects – General population		
1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8- 18(even numbered) acyl) derivs., hydroxides, inner salts	1,18 mg/m ³	Inhalation	Long term – Systemic effects - Workers		
1-Propanaminium, N-(3- aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8- 18(even numbered) acyl) derivs., hydroxides, inner salts	0,29 mg/ m ³	Inhalation	Long term – Systemic effects – General population		

1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,33 mg/kg	Dermal	Long term – Systemic effects - Workers
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,17 mg/kg	Dermal	Long term – Systemic effects – General population

PNEC

Substance	PNEC	Route of Exposure	Duration of Exposure	Source	Remarks
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,32 mg/kg	Soil	No data available		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	1.1 mg/L	Freshwater	No data available		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	4,4 mg/kg	Freshwater sediment	No data available		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,11 mg/L	Marine water	No data available		
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,44 mg/L	Marine water sediment	No data available		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,0414 mg/kg	Soil	No data available		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,021 mg/L	Freshwater	Continuous		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	6.97 mg/kg	Freshwater sediment	No data available		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0,00152 mg/L	Marine water	No data available		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	0.697 mg/kg	Marine water sediment	No data available		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts	100 mg/L	Swage Treatment Plant	No data available		

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, eating and drinking are not allowed in the work premises.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally Use only CE marked protective equipment
Respiratory equipment No specific requirements

Skin protection

Recommended	Standards	Type/Category
Dedicated work clothing should be worn	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Vinyl/PVC	0,6	-	-

Eye protection

Recommended	Standards
Wear safety glasses with side shields.	EN166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Pale yellow.
Odour	Characteristic.
Odour Threshold (ppm)	No data available
pH	6,5 - 9
Density (g/cm ³)	~ 1,05
Viscosity	< 100 mPa.s (20.00 °C)
Phases changes	Melting point: 0°C Boiling point: No data available Vapour pressure: No data available Vapour density: No data available Decomposition temperature: No data available Evaporation rate (n-butylacetate = 100): No data available
Data on fire and explosion hazards	Flash point: No data available Ignition: No data available Auto flammability: No data available Explosive limits: No data available Explosive properties: No data available Oxidizing properties: No data available
Solubility	Solubility in water: Soluble n-octanal/water coefficient: No data available Solubility if fat (g/L): No data available

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

10.3. Possibility of hazardous reactions

No special.

10.4. Conditions to avoid

No special.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effect

Acute toxicity

Substance	Species	Test	Route of exposure	Result
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Rat	LD50	Oral	5660,00 mg/kg
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Mouse	LD50	Oral	2410,00 mg/kg
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Rat	LC50	Inhalation	29,00 ppm
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Rabbit	LD50	Dermal	2764,00 mg/kg
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	Rat	LD50	Oral	2950,00 mg/kg
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	Rat	LD50	Dermal	2000,00 mg/kg

Skin corrosion / irritation

No data available

Serious eye damage / irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard

No data available

Long term effects

No special

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Duration	Result
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Fish	LC50	96 hours	1300,00 mg/L
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Algae	EC50	96 hours	100,00mg/L
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Daphnia	EC50	48 hours	100,00mg/L
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	Fish	LC50	96 hours	0.23 mg/L
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	Algae	NOEC	72 hours	0.76 mg/L
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	Daphnia	EC50	48 hours	4.00 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Yes	OECD 301 C (Modified MITI Test)	80 %
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	Yes		57 %

12.3. Bio accumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	No		
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N, Ndimethyl-3-sulfo-, N-(C8-18(even numbered)acyl) derivs., hydroxides, inner salts	No		

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.

EWC code

16 03 06 Organic wastes other than those mentioned in 16 03 05

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1. – 14.4

Not dangerous goods according to ADR, IATA and IMDG

ADR / RID

Not applicable

IMDG

Not applicable

Marine pollutant

No

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 for application:	No specific requirements No special
Demands for specific education:	No special
SEVESO – Categories / dangerous substances:	Not applicable
Additional information:	Not applicable
Sources:	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP). Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3	H319, Causes serious eye irritation. H318, Causes serious eye damage. H412, Harmful to aquatic life with long lasting effects.
Abbreviations and acronyms	ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] CSA = Chemical Safety Assessment CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IARC = International Agency for Research on Cancer (IARC)
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable

Emergency Phone No.:

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New Zealand (English) 0800 446 881

The safety data sheet is validated by CHR

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
