

# SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier
Trade name
Shine n Dry Premium
Product no.
88
Unique formula identifier (UFI)
8A50-VXNG-999K-TFTC
1.2. Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses of the substance or mixture
Drying agent
Uses advised against
No special
1.3. Details of the supplier of the safety data sheet
Company and address
Blue & Green AB
Stenorsvägen 52
261 44 Landskrona
Sweden
+46 418 399000
www.blueandgreen.se
E-mail
info@blueandgreen.se
Revision
19/07/2022
SDS Version
1.0
1.4. Emergency telephone number Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 "First aid measures".
SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
Skin Irrit. 2; H315, Causes skin irritation.
Eye Irrit. 2; H319, Causes serious eye irritation.
2.2. Label elements
Hazard pictogram(s)
Signal word
Warning
Hazard statement(s)
Causes skin irritation. (H315)
Causes serious eye irritation. (H319)
Safety statement(s)
General
If medical advice is needed, have product container or label at hand. (P101)



Prevention	of children. (P102)			
	on/protective gloves. (P280)			
	bughly after handling. (P264)			
Response				
		eral minutes. Re	move contact lenses, if presen	t and easy to
	ng. (P305+P351+P338) rrsists: Get medical advice/att	tention (P337+F	2313)	
Storage			5.57	
-				
Disposal -				
Hazardous substances				
No special				
3. Other hazards Additional labelling				
Not applicable				
Additional warnings				
	does not contain any substar	nces considered	to meet the criteria classifying	g them as PB
and/or vPvB.				
CTION 3: Composition/info	ormation on ingredients			
2. Mixtures				
Product/substance	Identifiers	% w/w	Classification	Note
2-butoxyethanol	CAS No.: 111-76-2	10-15%	Acute Tox. 4, H302	[1]
	EC No.: 203-905-0		Skin Irrit. 2, H315 Eye Irrit. 2, H319	
	UK-REACH:		Acute Tox. 4, H332	
	Index No.: 603-014-00-0			
Fatty acids, C18 unsatd., reaction products with	CAS No.: 1335202-95-3	10-15%	Skin Irrit. 2, H315 Eye Irrit. 2, H319	
			Eye IIII. 2, H519	
triethanolamine, di-Me	EC No.: 931-216-1			
triethanolamine, di-Me	UK-REACH:			
triethanolamine, di-Me				
triethanolamine, di-Me	UK-REACH:	5-10%	Flam. Liq. 2, H225 Eve Irrit. 2, H319	
triethanolamine, di-Me sulfate-quaternized	UK-REACH: Index No.:	5-10%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
triethanolamine, di-Me sulfate-quaternized	UK-REACH: Index No.: CAS No.: 67-63-0	5-10%	Eye Irrit. 2, H319	
triethanolamine, di-Me sulfate-quaternized	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7	5-10%	Eye Irrit. 2, H319	
triethanolamine, di-Me sulfate-quaternized propan-2-ol	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0	5-10%	Eye Irrit. 2, H319 STOT SE 3, H336	[1].
triethanolamine, di-Me sulfate-quaternized	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0 CAS No.: 112-34-5		Eye Irrit. 2, H319	[1], [3]
triethanolamine, di-Me sulfate-quaternized propan-2-ol	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0 CAS No.: 112-34-5 EC No.: 203-961-6		Eye Irrit. 2, H319 STOT SE 3, H336	
triethanolamine, di-Me sulfate-quaternized propan-2-ol	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0 CAS No.: 112-34-5		Eye Irrit. 2, H319 STOT SE 3, H336	
triethanolamine, di-Me sulfate-quaternized propan-2-ol	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0 CAS No.: 112-34-5 EC No.: 203-961-6		Eye Irrit. 2, H319 STOT SE 3, H336	
triethanolamine, di-Me sulfate-quaternized propan-2-ol	UK-REACH: Index No.: CAS No.: 67-63-0 EC No.: 200-661-7 UK-REACH: Index No.: 603-117-00-0 CAS No.: 112-34-5 EC No.: 203-961-6 UK-REACH: Index No.: 603-096-00-8		Eye Irrit. 2, H319 STOT SE 3, H336	



alkanes, isoalkanes, cyclics, < 2% aromatics	EC No.: 929-018-5		Asp. Tox. 1, H304	
	UK-REACH:			
	Index No.:			
Citric acid	CAS No.: 5949-29-1	1-3%	Eye Irrit. 2, H319	
	EC No.: 201-069-1			
	UK-REACH:			
	Index No.:			

-----

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

[1] European occupational exposure limit

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

## **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 person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### **Skin contact**

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. If skin irritation occurs: Get medical advice/attention.

### **Eye contact**

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### 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

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

## IF exposed or concerned:

Get immediate medical advice/attention.

### **Information to medics**

Bring this safety data sheet or the label from this product.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media



Not applicable
5.2. Special hazards arising from the substance or mixture
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the
sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds
are produced. These are:
Carbon oxides (CO / CO2).
5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure
contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.
SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
Avoid direct contact with spilled substances.
6.2. Environmental precautions
Avoid discharge to lakes, streams, sewers, etc.
6.3. Methods and material for containment and cleaning up
Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Use sand, 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 13 on "Disposal considerations" in regard of handling of waste.
See section 8 "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 8 "Exposure controls/personal protection" for information on personal protection.
7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed containers and store protected from moisture and light. Containers should be dated when
opened and tested periodically for the presence of peroxides. Do not exceed storage time limits. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Recommended storage material
Always store in containers of the same material as the original container.
Storage temperature
Room temperature 18 to 23°C
Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
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-butoxyethanol Long term exposure limit (8 hours) (ppm): 25
Long term exposure limit (8 hours) (ppm). 25 Long term exposure limit (8 hours) (mg/m <sup>3</sup> ): 123
Short term exposure limit (15 minutes) (ppm): 50
Short term exposure limit (15 minutes) (ppm): 56 Short term exposure limit (15 minutes) (mg/m <sup>3</sup> ): 246
Annotations:



Sk = Can be absorbed through the skin and lead to systemic toxicity.

## propan-2-ol

Long term exposure limit (8 hours) (ppm): 400 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 999 Short term exposure limit (15 minutes) (ppm): 500 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 1250

2-(2-butoxyethoxy)ethanol Long term exposure limit (8 hours) (ppm): 10 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 67,5 Short term exposure limit (15 minutes) (ppm): 15 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 101,2

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

### DNEL

2-(2-butoxyethoxy)ethanol

Duration	Route of exposure	DNEL
Long term – Local effects • Workers	Inhalation	67.5 mg/m³
Short term – Local effects · Workers	Inhalation	101.2 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	6,25 mg/kg bw/day
-butoxyethanol		
Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Inhalation	59 mg/m³
Long term – Systemic effects - Workers	Inhalation	98 mg/m³
Short term – Local effects General population	Inhalation	147 mg/m³
Short term – Local effects · Workers	Inhalation	246 mg/m³
Short term – Systemic effects - General population	Inhalation	426 mg/m³
Short term – Systemic effects - Workers	Inhalation	1 091 mg/m³
Long term – Systemic effects - General population	Oral	6.3 mg/kg bw/day
Short term – Systemic	Oral	26.7 mg/kg bw/day



	effects - General population		
ł	Fatty acids, C18 unsatd.,	reaction products with triethanolamine, di	i-Me sulfate-quaternized
	Duration	Route of exposure	DNEL
	Long term – Systemic effects - General population	Dermal	187.5 mg/kg bw/da
	Long term – Systemic effects - Workers	Dermal	312.5 mg/kg bw/da
	Long term – Systemic effects - General population	Inhalation	13 mg/m³
	Long term – Systemic effects - Workers	Inhalation	44 mg/m <sup>3</sup>
	Long term – Systemic effects - General population	Oral	7.5 mg/kg bw/day
I	propan-2-ol		
	Duration	Route of exposure	DNEL
	Long term – Systemic effects - General population	Dermal	319 mg/kg bw/day
	Long term – Systemic effects - Workers	Dermal	888 mg/kg bw/day
	Long term – Systemic effects - General population	Inhalation	89 mg/m <sup>3</sup>
	Long term – Systemic effects - Workers	Inhalation	500 mg/m³
	Long term – Systemic effects - General population	Oral	26 mg/kg bw/day
<b>C</b>	2-(2-butoxyethoxy)ethar	ol	
	Route of exposure	Duration of Exposure	PNEC
	Freshwater		1.1 mg/L
	Freshwater sediment		4.4 mg/kg dw
	Intermittent release		11 mg/L
	Marine water		0.11 mg/L
	Marine water sediment		0.44 mg/kg dw



Soil		0.32 mg/kg dw
2-butoxyethanol		
Route of exposure	Duration of Exposure	PNEC
Freshwater		8.8 mg/L
Freshwater sediment		34.6 mg/kg
Intermittent release		26.4 mg/L
Marine water		0.88 mg/L
Marine water sediment		3.46 mg/kg
Sewage treatment plant		463 mg/L
Soil		2.33 mg/kg
Citric acid		
Route of exposure	Duration of Exposure	PNEC
Freshwater		0.44 mg/L
Freshwater sediment		34.6 mg/kg
Marine water		0.044 mg/L
Marine water sediment		3.46 mg/kg
Sewage treatment plant	-	1000 mg/l
Sewage treatment plant		1000 mg/L
Soil		33.1 mg/kg
Fatty acids, C18 unsatc	., reaction products with triethanolamine, di-	Me sulfate-quaternized
Route of exposure	Duration of Exposure	PNEC
Freshwater		0.002 mg/L
Freshwater sediment		0.58 mg/kg
Marine water		0 mg/L
Marine water sediment		0.058 mg/kg
Sewage treatment plant		2.96 mg/L
Soil		0.115 mg/kg
propan-2-ol		
Route of exposure	Duration of Exposure	PNEC
Freshwater		140.9 mg/L
		552 mg/kg
Freshwater sediment		
Freshwater sediment Intermittent release		140.9 mg/L



			552 n	ng/kg
Sewage treatment plant			2251	mg/L
Soil			28 m	g/kg
.2. Exposure controls Compliance with the giv General recommendatior		xposure limits values sl	nould be controlled on a regul	ar basis.
Smoking, drinking and o		od is not allowed in the	work area.	
Exposure scenarios	-			
There are no exposure s	scenarios impleme	nted for this product.		
Exposure limits				c
occupational users are s occupational hygiene lir Appropriate technical me	mit values above.	ally set maximum cond	centrations for occupational ex	kposure. See
		a minimum and helow	current limit values (see abov	e) Installation (
	f normal air flow in	the work room is not	sufficient is recommended. En	
Hygiene measures	,			
Take off contaminated of				
Measures to avoid enviro	· · · · · · · · · · · · · · · · · · ·	e		
No specific requirement				
ndividual protection measu	ires, such as perso	onal protective equipr	nent	
Generally				
Use only UKCA marked	protective equipme	ent.		
Respiratory Equipment				
No specific requirement	ts			
No specific requirement Skin protection				
No specific requirement Skin protection No specific requirement				
No specific requirement Skin protection				
No specific requirement Skin protection No specific requirement	ts Glove thickness	Breakthrough time	Standards	
No specific requirement Skin protection No specific requirement Hand protection	ts	Breakthrough time (min.)	Standards	
No specific requirement Skin protection No specific requirement Hand protection	ts Glove thickness		Standards EN374-2, EN374-3, EN388	
No specific requirement Skin protection No specific requirement Hand protection Material	ts Glove thickness	(min.)	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile	ts Glove thickness	(min.)	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection	ts Glove thickness (mm) -	(min.)	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side	ts Glove thickness (mm) - Standards	(min.)	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields.	ts Glove thickness (mm) - Standards EN166	(min.)	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem .1. Information on basic physical	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem .1. Information on basic phy Physical state	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem .1. Information on basic phy Physical state Liquid	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem .1. Information on basic phy Physical state Liquid Colour	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem .1. Information on basic phy Physical state Liquid Colour Blue	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	
No specific requirement Skin protection No specific requirement Hand protection Material Nitrile Eye protection Type Safety glasses with side shields. CTION 9: Physical and chem .1. Information on basic phy Physical state Liquid Colour	ts Glove thickness (mm) - Standards EN166 EN166	(min.) > 480	EN374-2, EN374-3,	



pH Testing net valuent or net pessible due to network of the product	
Testing not relevant or not possible due to nature of the product.	
Density (g/cm <sup>3</sup> )	
0.96	
Kinematic viscosity	
Testing not relevant or not possible due to nature of the product.	
Particle characteristics	
Does not apply to liquids.	
Phase changes	
Melting point/Freezing point (°C)	
Testing not relevant or not possible due to nature of the product.	
Softening point/range (waxes and pastes) (°C)	
Does not apply to liquids. Boiling point (°C)	
Testing not relevant or not possible due to nature of the product.	
Vapour pressure	
Testing not relevant or not possible due to nature of the product.	
Relative vapour density	
Testing not relevant or not possible due to nature of the product.	
Decomposition temperature (°C)	
Testing not relevant or not possible due to nature of the product.	
Data on fire and explosion hazards	
Flash point (°C)	
Testing not relevant or not possible due to nature of the product.	
Ignition (°C)	
Testing not relevant or not possible due to nature of the product.	
Auto flammability (°C)	
Testing not relevant or not possible due to nature of the product.	
Lower and upper explosion limit (% v/v)	
Testing not relevant or not possible due to nature of the product.	
Solubility	
Solubility in water	
Completely soluble	
n-octanol/water coefficient	
Testing not relevant or not possible due to nature of the product.	
Solubility in fat (g/L)	
Testing not relevant or not possible due to nature of the product.	
9.2. Other information	
Other physical and chemical parameters	
No data available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
No data available	
10.2. Chemical stability	
The product is stable under the conditions, noted in section 7 "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.	



Product/substance Test method Species Route of exposure Test Result Other information Product/substance	2-butoxyethanol Guinea pig Oral LD50 1414 mg/kg
Test method Species Route of exposure Test Result Other information	Guinea pig Oral LD50
Species Route of exposure Test Result Other information	Oral LD50
Route of exposure Test Result Other information	Oral LD50
Route of exposure Test Result Other information	Oral LD50
Test Result Other information	
Other information	1414 mg/kg
Product/substance	
Test method	2-butoxyethanol
Species	Guinea pig, female
Route of exposure	Inhalation
Test	LCO
Result	>3.1 mg/L
Other information	
Product/substance Test method	2-butoxyethanol
Species	Rat
Route of exposure	Oral
Test	LD50
Result	1300 mg/kg
Other information	
Product/substance Test method	2-butoxyethanol
Species	Guinea pig
Route of exposure	Dermal
Test	LD0
Result	>2000 mg/kg
Other information	
Product/substance Test method	Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize
Species	Rat
' Route of exposure	Oral
Test	LD50
Result	>2000 mg/kg
Other information	
Product/substance Test method	Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kg



Product/substance	propan-2-ol	
Test method	OECD 401	
Species	Rat	
Route of exposure	Oral	
Test	LD50	
Result	5840 mg/kg	
Other information	Joro myrky	
Product/substance	propan-2-ol	
Test method	OECD 403	
Species	Rat	
Route of exposure	Inhalation	
Test	LC50	
Result	>25 mg/L	
Other information		
Product/substance	propan-2-ol	
Test method	OECD 402	
Species	Rabbit	
Route of exposure	Dermal	
Test	LD50	
Result	13900 mg/kg	
Other information		
Product/substance	2-(2-butoxyethoxy)ethanol	
Test method	2-(2-butoxyethoxy)ethanol	
	Rat	
Species	Oral	
Route of exposure Test	LD50	
Result	>2000 mg/kg	
Other information		
Product/substance	2-(2-butoxyethoxy)ethanol	
Test method		
Species	Rabbit	
Route of exposure	Dermal	
Test	LD50	
Result	2764 mg/kg	
Other information		
Product/substance	2-(2-butoxyethoxy)ethanol	
Test method		
Species	Rat	
Route of exposure	Inhalation	
Test	LC50	
Result	>29 ppm	
Other information		
Product/substance	2-(2-butoxyethoxy)ethanol	
Test method		



Species	Mouse
Route of exposure	Oral
Test	LD50
Result	2410 mg/kg
Other information	
Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>5000 mg/kg
Other information	
Product/substance Test method	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>3160 mg/kg
Other information	
Product/substance Test method	Citric acid
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	2000 mg/kg
Other information	
Product/substance Test method	Citric acid
Species	Mouse
Route of exposure	Oral
Test	LD50
Result	5400 mg/kg
Other information	
Skin corrosion/irritati	on
Product/substance	2-(2-butoxyethoxy)ethanol
Test method	OECD 404
Species	Rabbit
Duration	
Result	No adverse effect observed (Not irritating)
Other information	
Causes skin irritatior	٦.
Serious eye damage/in	
Product/substance	2-(2-butoxyethoxy)ethanol
Test method	OECD 404



Species	Rabbit
Duration	
Result	Adverse effect observed (Irritating)
Other information	
Causes serious eye ir	ritation.
Respiratory sensitisati	
	ata, the classification criteria are not met.
Skin sensitisation	
Product/cubstance	2/2 hutowysthowylethanol
Product/substance Test method	2-(2-butoxyethoxy)ethanol OECD 406
Species	Guinea pig
Result Other information	No adverse effect observed (not sensitising)
Other Information	
Come call sectors in the	
Germ cell mutagenicity	
	ata, the classification criteria are not met.
Carcinogenicity	ata, the classification criteria are not met.
Reproductive toxicity	מנמ, נווב נומסטוונמנוטוו נוונפוומ מו ב ווטנ ווופנ.
	ata, the classification criteria are not met.
STOT-single exposure	מנמ, נהב כומכסווכמנוסדו כדוכברום מדב דוסר והבנ.
	ata, the classification criteria are not met.
STOT-repeated exposu	
	ata, the classification criteria are not met.
Aspiration hazard	
	ata, the classification criteria are not met.
11.2. Information on othe	
Long term effects	
	s substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure
	eased absorption potential of other hazardous substances at the area of exposure.
Endocrine disrupting p	
No special	
Other information	
	been classified by IARC as a group 3 carcinogen.
-	n classified by IARC as a group 3 carcinogen.
SECTION 12: Ecological info	
-	
12.1. Toxicity	
Product/substance	2-butoxyethanol
Test method	
Species	Algae, Pseudokirchneriella subcapitata
Compartment	
Duration	72 hours
Test	EC50
Result	1840 mg/L
Other information	
Product/substance	2-butoxyethanol
Test method	
Species	Fish, Oncorhynchus mykiss
species	



Compartment	
Duration	96 hours
Test	LC50
Result Other information	1474 mg/L
Product/substance	2-butoxyethanol
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	EC50
Result	1550 mg/L
Other information	
Product/substance Test method	2-butoxyethanol
Species	Fish, Danio rerio
Compartment	
Duration	21 days
Test	NOEC
Result	100 mg/L
Other information	
Product/substance	2-butoxyethanol
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	21 days
Test	NOEC
Result	100 mg/L
Other information	
Product/substance	Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	EC50
Result	2.23 mg/L
Other information	
Product/substance Test method	Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
Species	Algae, Desmodesmus subspicatus
Compartment	
Duration	72 hours
Test	EC50
Result	1.9 mg/L
Other information	



Product/substance	Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
Test method	
Species	Fish, Oncorhynchus mykiss
Compartment	
Duration	96 hours
Test	LC50
Result	1.91 mg/L
Other information	
Product/substance	propan-2-ol
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	>100 mg/L
Other information	
Product/substance	propan-2-ol
Test method	ρισματι 2-01
	Algae
Species	Algae
Compartment	
Duration	8 d
Test	LOEC
Result	1000 mg/L
Other information	
Product/substance	propan-2-ol
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	48 hours
Test	LC50
Result	>100 mg/L
Other information	
Product/substance	propan-2-ol
Test method	p. op 01
Species	Algae
Compartment	, ngao
Duration	72 hours
Test	EC50
	>100 mg/L
Result	<100 mg/L
Other information	
Product/substance	2-(2-butoxyethoxy)ethanol
Test method	
Species	Fish, Leuciscus idus
Compartment	
Duration	96 hours



Other information       2-(2-butoxyethoxylethanol         Test method       Algae, Scenedesmus subspicatus         Species       Algae, Scenedesmus subspicatus         Compartment       Duration         Duration       96 hours         Test       ECS0         Result       >100 mg/L         Other information       -         Product/substance       2-(2-butoxyethoxylethanol         Test method       -         Species       Daphnia, Daphnia magna         Compartment       -         Duration       48 hours         Test       ECS0         Result       >100 mg/L         Other information       -         Product/substance       Clric acid         Test       ECS0         Result       >100 mg/L         Other information       -         Product/substance       Clric acid         Test       LCS0         Result       440 mg/L         Other information       -         Product/substance       Clric acid         Test       LCS0         Result       1535 mg/L         Other information       -         Product/substance       2-b	Test Result	LC50 >100 mg/L
Test method       Algae, Scenedesmus subspicatus         Species       Algae, Scenedesmus subspicatus         Duration       96 hours         Test       EC50         Result       >100 mg/L         Other information       7         Product/substance       2-(2-butoxyethoxy)ethanol         Test method       5         Species       Daphnia, Daphnia magna         Compartment       0         Duration       48 hours         Test       EC50         Result       >100 mg/L         Other information       48 hours         Test       EC50         Result       >100 mg/L         Other information       5         Product/substance       Citric acid         Test       EC50         Result       40 ng/L         Other information       5         Product/substance       Citric acid         Test       EC50         Result       40 ng/L         Other information       5         Product/substance       Citric acid         Test       EC50         Result       40 ng/L         Other information       5		- Too mg/L
SpeciesAlgae, Scenedesmus subspicatusCompartment96 hoursTestECS0Result>100 mg/LOther information2-(2-butoxyethoxy)ethanolProduct/substance2-(2-butoxyethoxy)ethanolSpeciesDaphnia, Daphnia magnaCompartment2-(2-butoxyethoxy)ethanolDuration48 hoursTestECS0Result>100 mg/LOther information2-(2-butoxyethoxy)ethanolProduct/substanceCitric acidTestECS0Result>100 mg/LOther information2-100 mg/LOuration96 hoursTest methodSpeciesSpeciesFishCompartment2-100 mg/LOuration96 hoursTest methodSpeciesSpeciesDaphniaCompartment2-100 mg/LOuration96 hoursTest methodSpeciesSpeciesDaphniaCompartment2-100 mg/LOuration96 hoursTest methodSpeciesSpeciesDaphniaCompartment2-100 mg/LProduct/substanceCitric acidTest methodSpeciesSpeciesDaphniaCompartment2-100 mg/LProduct/substance2-4 hoursTest methodSpeciesSpeciesDaphniaCompartment2-100 mg/LOursSpeciesProduct/substance2-butoxyethanolBiodegradableYes <td></td> <td>2-(2-butoxyethoxy)ethanol</td>		2-(2-butoxyethoxy)ethanol
Duration         96 hours           Test         EC50           Result         >100 mg/L           Other information	Species	Algae, Scenedesmus subspicatus
Test       EC50         Result       >100 mg/L         Other information	Compartment	
Result Other information       >100 mg/L         Product/substance Test method       2-(2-butoxyethoxy)ethanol         Species       Daphnia, Daphnia magna         Compartment Duration       48 hours         Compartment       000 mg/L         Other information       100 mg/L         Product/substance Test       Citric acid         Result       >100 mg/L         Other information       100 mg/L         Product/substance Test method       Citric acid         Species       Fish         Compartment Duration       96 hours         Duration       96 hours         Test       LCS0         Result       440 mg/L         Other information       100 mg/L         Product/substance       Citric acid         Test       LCS0         Result       Daphnia         Compartment 	Duration	96 hours
Other information     2-(2-butoxyethoxy)ethanol       Product/substance     2-(2-butoxyethoxy)ethanol       Test method     3       Species     Daphnia, Daphnia magna       Compartment     48 hours       Duration     48 hours       Test     EC50       Result     >100 mg/L       Other information     5       Product/substance     Citric acid       Test     EC50       Result     96 hours       Test     EC50       Result     96 hours       Test     EC50       Result     440 mg/L       Other information     96 hours       Test     EC50       Result     440 mg/L       Other information     96 hours       Test method     5       Species     Daphnia       Compartment     90 aphnia       Outher information     100 mg/L       Product/substance     Citric acid       Test method     55 mg/L       Other information     24 hours       Product/substance     2-butoxyethanol       Biodegradabie     Yes       Test method     553 mg/L       Other information     100 mg/L       Product/substance     2-butoxyethanol       Biodegradabie	Test	EC50
Product/substance       2-(2-butoxyethoxy)ethanol         Test method	Result	>100 mg/L
Test method       Species       Daphnia, Daphnia magna         Compartment       Uruation       48 hours         Test       EC50         Result       >100 mg/L         Other       Image: Compartment         Product/substance       Citric acid         Test method       Image: Compartment         Product/substance       Citric acid         Test method       Image: Compartment         Duration       96 hours         Test       LC50         Result       440 mg/L         Other       Image: Compartment         Duration       96 hours         Test       LC50         Result       440 mg/L         Other       Image: Compartment         Duration       9a hours         Test       LC50         Result       440 mg/L         Other       Image: Compartment         Duration       24 hours         Species       Daphnia         Compartment       Image: Compartment         Duration       24 hours         Test       LC50         Result       1535 mg/L         Other       Image: Compartment         Duration	Other information	
Compartment       48 hours         Duration       48 hours         Test       EC50         Result       >00 mg/L         Other information	Test method	
Test       EC50         Result       >100 mg/L         Other information       -         Product/substance       Citric acid         Test method       -         Species       Fish         Compartment       -         Duration       96 hours         Test       LC50         Result       440 mg/L         Other information       -         Product/substance       Citric acid         Test method       -         Species       Daphnia         Other information       -         Product/substance       Citric acid         Test method       -         Species       Daphnia         Compartment       -         Duration       24 hours         Test       LC50         Result       1535 mg/L         Other information       -         Product/substance       2-butoxyethanol         Biodegradable       Yes         Test method       OECD 301 B         Result       0,4%         Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize         Biodegradable       Yes <td></td> <td>Daphnia, Daphnia magna</td>		Daphnia, Daphnia magna
Result Other information       >100 mg/L         Product/substance Test method       Citric acid         Species       Fish         Compartment       Uuration         Duration       96 hours         Test       LC50         Result       440 mg/L         Other information       Citric acid         Product/substance       Citric acid         Test method       Citric acid         Test method       Citric acid         Test method       Daphnia         Compartment       Citric acid         Test method       Species         Species       Daphnia         Compartment       Citric acid         Test method       Species         Species       Daphnia         Compartment       Species         Duration       24 hours         Test       LC50         Result       1535 mg/L         Other information       Species         Product/substance       2-butoxyethanol         Biodegradable       Yes         Test method       OECD 301 B         Result       0,4%         Product/substance       Faty acids, C18 unsatd., reaction products with triethanolamine, di-Me		48 hours
Other information         Product/substance       Citric acid         Test method       Fish         Species       Fish         Compartment       06 hours         Duration       96 hours         Test       LC50         Result       440 mg/L         Other information       Citric acid         Product/substance       Citric acid         Test method       Eish         Species       Daphnia         Compartment       Duration         Product/substance       Citric acid         Test method       Eish         Species       Daphnia         Compartment       Eish         Duration       24 hours         Test       LC50         Result       1535 mg/L         Other information       Eish mg/L         Product/substance       2-butoxyethanol         Biodegradable       Yes         Test method       GECD 301 B         Result       90,4%         Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternizz         Biodegradable       Yes	Test	EC50
Product/substance     Citric acid       Test method     Fish       Compartment     96 hours       Duration     96 hours       Test     LC50       Result     440 mg/L       Other information     Citric acid       Product/substance     Citric acid       Test     Citric acid       Test method     Citric acid       Species     Daphnia       Compartment     Duration       Duration     24 hours       Test     LC50       Result     1535 mg/L       Other information     1535 mg/L       Product/substance     2-butoxyethanol       Biodegradable     Yes       Test method     Species       Product/substance     2-butoxyethanol       Biodegradable     Yes       Test method     Species       Product/substance     Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize	Result	>100 mg/L
Test method Species Fish Compartment Duration 96 hours Test LC50 Result 440 mg/L V Product/substance Citric acid Test method Species Daphnia Compartment Duration 24 hours Test LC50 Result 1535 mg/L V Product/substance Addegradable Yes Test method Biodegradable Yes Test method Species Parsitence and Ger State St	Other information	
Compartment Duration 96 hours Test LC50 Result 440 mg/L Other information Product/substance Citric acid Test method Species Daphnia Compartment Duration 24 hours Test LC50 Result 1535 mg/L Other information Presistence and degradable Yes Product/substance 2-butoxyethanol Biodegradable Yes Test method OECD 301 B Result 90,4% Product/substance Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize Biodegradable Yes		Citric acid
Duration       96 hours         Test       LC50         Result       440 mg/L         Other information	Species	Fish
Test       LC50         Result       440 mg/L         Other information       Image: Comparison of the sum of		
Result       440 mg/L         Other information		
Other information         Product/substance       Citric acid         Test method		
Product/substanceCitric acidTest methodDaphniaSpeciesDaphniaCompartmentUrationDuration24 hoursTestLC50Result1535 mg/LOther informationVes		440 mg/L
Test method       Daphnia         Species       Daphnia         Compartment       24 hours         Duration       24 hours         Test       LC50         Result       1535 mg/L         Other information       2-butoxyethanol         Biodegradable       Yes         Test method       OECD 301 B         Result       90,4%         Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternizet	Uther Information	
CompartmentDuration24 hoursTestLC50Result1535 mg/LOther information	Test method	
Duration24 hoursTestLC50Result1535 mg/LOther information		Daphnia
TestLC50Result1535 mg/LOther information		24 hours
Result       1535 mg/L         Other information       1535 mg/L         Persistence and degradable       2-butoxyethanol         Product/substance       2-butoxyethanol         Biodegradable       Yes         Test method       OECD 301 B         Product/substance       90,4%         Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize         Yes       Yes		
Other information         Persistence and degradability         Product/substance       2-butoxyethanol         Biodegradable       Yes         Test method       OECD 301 B         Result       90,4%         Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize         Biodegradable       Yes		
Product/substance2-butoxyethanolBiodegradableYesTest methodOECD 301 BResult90,4%Product/substanceFatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternizeBiodegradableYes	Other information	
Biodegradable     Yes       Test method     OECD 301 B       Result     90,4%       Product/substance     Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize       Biodegradable     Yes	Persistence and deg	radability
Test method       OECD 301 B         Result       90,4%         Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize         Biodegradable       Yes		
Result     90,4%       Product/substance     Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize       Biodegradable     Yes		
Product/substance       Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternize         Biodegradable       Yes		
Biodegradable Yes	Result	90,4%
		Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
Test method     OECD 301 B       Result     >60%		



Product/substance	propan-2-ol
Biodegradable	Yes
Test method	
Result	
Kesuk	
Product/substance	2-(2-butoxyethoxy)ethanol
Biodegradable	Yes
Test method	OECD 301 E
Result	100%
Product/substance	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Biodegradable	Yes
Test method	
Result	
Product/substance	Citric acid
Biodegradable	Yes
Test method	
Result	
l2.3. Bioaccumulative po	tential
Product/substance	2-butoxyethanol
Test method	
Potential	No
bioaccumulation	
LogPow	0.8100
BCF	No data available
Other information	
Product/substance	propan-2-ol
Test method	
. cot method	
Potontial	No
Potential	Νο
bioaccumulation	
bioaccumulation LogPow	0.0500
bioaccumulation LogPow BCF	
bioaccumulation LogPow	0.0500
bioaccumulation LogPow BCF Other information	0.0500 No data available
bioaccumulation LogPow BCF Other information Product/substance	0.0500
bioaccumulation LogPow BCF Other information Product/substance Test method	0.0500 No data available 2-(2-butoxyethoxy)ethanol
bioaccumulation LogPow BCF Other information Product/substance Test method Potential	0.0500 No data available
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation	0.0500 No data available 2-(2-butoxyethoxy)ethanol No
bioaccumulation LogPow BCF Other information Product/substance Test method Potential	0.0500 No data available 2-(2-butoxyethoxy)ethanol
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation	0.0500 No data available 2-(2-butoxyethoxy)ethanol No
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation LogPow	0.0500 No data available 2-(2-butoxyethoxy)ethanol No 1.0000
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation LogPow BCF Other information	0.0500 No data available 2-(2-butoxyethoxy)ethanol No 1.0000 No data available
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation LogPow BCF Other information Product/substance	0.0500 No data available 2-(2-butoxyethoxy)ethanol No 1.0000
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation LogPow BCF Other information Product/substance Test method	0.0500         No data available         2-(2-butoxyethoxy)ethanol         No         1.0000         No data available         Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation LogPow BCF Other information Product/substance Test method Potential	0.0500 No data available 2-(2-butoxyethoxy)ethanol No 1.0000 No data available
bioaccumulation LogPow BCF Other information Product/substance Test method Potential bioaccumulation LogPow BCF Other information Product/substance Test method	0.0500 No data available2-(2-butoxyethoxy)ethanolNo1.0000 No data availableHydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics



BCF Other information	No data available
Product/substance Test method	Citric acid
Potential bioaccumulation	No
LogPow	-1.7200
BCF Other information	No data available
12.4. Mobility in soil	
No data available	
	<b>vPvB assessment</b> lct does not contain any substances considered to meet the criteria classifying them as PBT
and/or vPvB. 12.6. Endocrine disrupti	ng properties
No special	
12.7. Other adverse effe	cts
No special	
SECTION 13: Disposal con	siderations
To the extent the m as explosive waste. HP 4 - Irritant (skin Dispose of contents Regulation (EU) No <b>EWC code</b>	irritation and eye damage) s/container to an approved waste disposal plant. 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
	r organic solvents, washing liquids and mother liquors
Specific labelling Not applicable Contaminated packing Packaging containi	ng residues of the product must be disposed of similarly to the product.
SECTION 14: Transport in	formation
14.1 UN / ID	0 14.2 UN proper shipping name 14.3 Hazard class(es) 14.4 PG* 14.5 Env** Other information
ADR -	
IMDG -	
IATA -	
14.6. Special precaution	ods according to ADR, IATA and IMDG.
Not applicable <b>14.7. Maritime transpor</b> t No data available	t in bulk according to IMO instruments



ECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Restrictions for application
No special
Demands for specific education
No specific requirements
SEVESO - Categories / dangerous substances
Not applicable
REACH, Annex XVII
2-(2-butoxyethoxy)ethanol is subject to restrictions, UK-REACH annex XVII (entry 55).
Additional information
Not applicable
Sources
The Health and Safety at Work etc. Act 1974 Regulations 2013.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as
retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of
Chemicals (REACH) as retained and amended in UK law.
15.2. Chemical safety assessment
No
ECTION 16: Other information
Full text of H-phrases as mentioned in section 3
EUH066, Repeated exposure may cause skin dryness or cracking.
H225, Highly flammable liquid and vapour.
H302, Harmful if swallowed.
H304, May be fatal if swallowed and enters airways.
H315, Causes skin irritation.
H319, Causes serious eye irritation.
H332, Harmful if inhaled.
H336, May cause drowsiness or dizziness.
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
CE = Conformité Européenne
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
	SCL = A specific concentration limit
	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
	UVBC = Unknown or variable composition, complex reaction products or of biological materials
	VOC = Volatile Organic Compound
	vPvB = Very Persistent and Very Bioaccumulative
Addi	itional information
	The classification of the substance/mixture in regard of health hazards are in accordance with the calculation
	methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The	safety data sheet is validated by
	Åsa Möller
Othe	er
	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.
	Country-language: GB-en