SAFETY DATA SHEET

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

Product identifier

Trade name or designation

of the mixture

Tridol S3 LT

Registration number

Aqueous Film Forming Foam (AFFF)

Synonyms SDS number

Product code

120-10

Date of first issue

19-November-2010

Version number

02

Revision date Supersedes date 03-December-2014 19-November-2010

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

Identified uses

Fire fighting foam concentrate.

Uses advised against

None known.

Details of the supplier of the safety data sheet

Supplier

Company name

Angus Fire Ltd Station Road

Bentham, Lancashire, LA2 7NA

Phone number:

0044 (0)15 2426 4000

e-mail

Address

general.enquiries@angusuk.co.uk

Contact person

EH&S Manager

Emergency telephone number

0044 (0)15 2426 4000 (Standard office hours: Monday to Friday 8:30am - 4:30pm GMT)

Section 2: Hazards identification

Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification Xn;R22, Xi;R36

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, oral Category 4 Harmful if swallowed.

Serious eye damage/eye irritation Category 2 Causes serious eye irritation.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Harmful if swallowed. Irritating to eyes. Occupational exposure to the substance or mixture may

cause adverse health effects.

Environmental hazards Not classified for hazards to the environment.

Specific hazards May cause skin irritation. May cause irritation of nose, throat and mucous membranes. May cause

mild central nervous system effects.

Symptoms can include irritation, redness, scratching of the cornea, and tearing. Symptoms may Main symptoms

include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure

may be headache, dizziness, tiredness, nausea and vomiting.

Label elements

Tridol S3 LT

SDS FII

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 2-(2-butoxyethoxy)-ethanol, Ethylene glycol



Signal word Warning

Hazard statements Harmful if swallowed. Causes serious eye irritation.

Precautionary statements

Prevention Wear eye/face protection. Do not eat, drink or smoke when using this product. Wash thoroughly

after handling.

Response IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse mouth. If eye irritation persists: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information Not applicable.

Other hazards Not a PBT or vPvB substance or mixture.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Ethylene glycol		20 - < 30	107-21-1 203-473-3	-	603-027-00-1	#
Classification:	DSD:	Xn;R22				
	CLP:	Acute Tox. 4;H30	2			
2-(2-butoxyethoxy)-eth	anol	10 - <20	112-34-5 203-961-6	-	603-096-00-8	#
Classification:	DSD:	Xi;R36				
	CLP:	Eye Irrit. 2;H319				
Magnesium sulphate		1 - < 3	7487-88-9 231-298-2	-	-	#
Classification:	DSD:	-				
	CLP:	-				
Cocoamido propyl beta	ine	0,1 - 1	61789-40-0 263-058-8	-	-	
Classification:	DSD:	Xi;R41, N;R50				
	CLP:	Eye Dam. 1;H318	3, Aquatic Acute 1;H	400		
Water		Balance	7732-18-5 231-791-2	-	-	
Classification:	DSD:	-				
	CLP:	-				

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

#: This substance has workplace exposure limit(s).

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in

percent by volume.

The full text for all R-phrases is displayed in Section 16.

Section 4: First aid measures

Description of first aid measures

Inhalation Move injured person into fresh air and keep person calm under observation. Get medical

attention, if needed.

Skin contact Wash the skin immediately with soap and water. Get medical attention if irritation develops and

persists.

Eye contact Immediately flush eye(s) with plenty of water. Remove any contact lenses. Get medical attention if

irritation develops or persists.

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not

induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and take

these instructions.

Most important symptoms and effects, both acute and delayed

Exposed may experience eye tearing, redness, and discomfort. Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache,

dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

Section 5: Firefighting measures

General fire hazards Product is an extinguishing media. It does not burn or support combustion.

Extinguishing media

Suitable extinguishing

media

No specific measures are required as this product is a fire extinguishing medium.

Unsuitable extinguishing

media

Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture

Not a fire hazard.

Advice for firefighters

Special protective equipment for firefighters

Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

Special firefighting

procedures

Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

Avoid contact with skin and eyes. Avoid inhalation of mists or aerosols. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet.

For emergency responders

Use personal protection recommended in section 8 of the SDS.

Environmental precautions

Methods and material for

containment and cleaning up Reference to other sections For large (industrial) releases, prevent spill from entering a waterway.

Absorb spillage with suitable absorbent material. Collect and dispose of spillage as indicated in

For personal protection, see section 8. For waste disposal, see Section 13.

Section 7: Handling and storage

Precautions for safe handling Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands

after handling. Keep away from food, drink and animal feeding stuffs. Pregnant women should not work with the product, if there is the least risk of exposure. Observe good industrial hygiene

practices

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store at temperature below 40°C. Store above freezing. Read and follow manufacturer's recommendations. Store away from incompatible materials.

Specific end use(s) Fire fighting foam concentrate.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Austria, MAK List

Components	Туре	Value
2-(2-butoxyethoxy)-ethanol (112-34-5)	MAK	97,5 mg/m3
()		10 ppm

Austria. MAK List

Components	Туре	Value	
	STEL	15 ppm	
		101,2 mg/m3	
Ethylene glycol (107-21-1)	Ceiling	20 ppm	
		52 mg/m3	
	MAK	26 mg/m3	
		10 ppm	
Belgium. Exposure Limit Values.			
Components	Туре	Value	Form
2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL	101,2 mg/m3	
		15 ppm	
	TWA	10 ppm	
		67,5 mg/m3	
Ethylene glycol (107-21-1)	STEL	40 ppm	Aerosol
	T14/4	104 mg/m3	Aerosol
	TWA	52 mg/m3 20 ppm	Aerosol Aerosol
Czech Republic. OELs. Governme	ent Decree 361	20 μμπ	VEIOPOI
Components	Type	Value	
·	·		
2-(2-butoxyethoxy)-ethanol 112-34-5)	Ceiling	100 mg/m3	
	TWA	70 mg/m3	
Ethylene glycol (107-21-1)	Ceiling	100 mg/m3	
	TWA	50 mg/m3	
France. Threshold Limit Values (\			
Components	Туре	Value	Form
2-(2-butoxyethoxy)-ethanol (112-34-5)	VLE	101,2 mg/m3	
		15 ppm	
	VME	10 ppm	
Tibe days - alored (407,04,4)	\	67,5 mg/m3	V
Ethylene glycol (107-21-1)	VLE	40 ppm	Vapor.
	\/\	104 mg/m3 52 mg/m3	Vapor. Vapor.
	VME	20 ppm	Vapor. Vapor.
Germany. TRGS 900, Limit Values	in the Amhient Air at the Wor		vapor.
Components	Type	Value	
2-(2-butoxyethoxy)-ethanol 112-34-5)	AGW	100 mg/m3	
Ethylene glycol (107-21-1)	AGW	10 ppm	
,		26 mg/m3	
Greece. OELs (Decree No. 90/199	9, as amended)	-	
Components	Туре	Value	Form
Ethylene glycol (107-21-1)	STEL	125 mg/m3	Vapor.
, 5, ()		50 ppm	Vapor.
	TWA	125 mg/m3	Vapor.
		50 ppm	Vapor.
Hungary. OELs. Joint Decree on 0	Chemical Safety of Workplaces	s	
Components	Туре	Value	
Ethylene glycol (107-21-1)	STEL	104 mg/m3	
Italy. OFI s	IVVA	o∠ mg/ms	
-	Type	Value	
•			
	SIEL	101,2 mg/m3	
112 07-01		15 nnm	
		то ррпп	
Ethylene glycol (107-21-1) Italy. OELs Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Type STEL	104 mg/m3 52 mg/m3 Value 101,2 mg/m3 15 ppm	

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Italy. OELs Components

Odinpolicitis	турс		
	TWA	10 ppm	
Ethylene glycol (107-21-1)	STEL	67,5 mg/m3 40 ppm	
		104 mg/m3	
	TWA	52 mg/m3 20 ppm	
Netherlands. OELs (binding)		20 ββιτι	
Components	Туре	Value	Form
2-(2-butoxyethoxy)-ethanol	STEL	100 mg/m3	101111
(112-34-5)	SIEL	100 mg/ms	
F.I. 1 (407.04.4)	TWA	50 mg/m3	
Ethylene glycol (107-21-1)	STEL TWA	104 mg/m3 52 mg/m3	Vapor. Vapor.
	IVVA	10 mg/m3	Mist.
Norway. Administrative Norms fo	r Contaminants in the Workpla	· ·	
Components	Туре	Value	Form
2-(2-butoxyethoxy)-ethanol (112-34-5)	TLV	10 ppm	
		68 mg/m3	
Ethylene glycol (107-21-1)	Ceiling	25 ppm	Vapor.
	TLV	10 mg/m3	Dust.
Poland. MACs. Minister of Labour Working Environment	and Social Policy Regarding N	Maximum Allowable Concent	rations and Intensities in
Components	Туре	Value	
2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL	100 mg/m3	
	T1 A / A	07 / 0	
	TWA	67 mg/m3	
	STEL TWA	50 mg/m3 15 mg/m3	nces in the air of working
Hygiene Norm GN 2.2.5.2439-09. I zones. Executive No. 76 of 30 apr	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa	nces in the air of workinເ Form
Hygiene Norm GN 2.2.5.2439-09. I zones. Executive No. 76 of 30 apr Components	STEL TWA Maximum allowable concentrat	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value	
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value 10 mg/m3	Form Aerosol
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value 10 mg/m3	Form Aerosol Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1)	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling TWA	50 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value 10 mg/m3	Form Aerosol Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9)	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling TWA Ceiling	50 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Lir	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling TWA Ceiling	50 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Lin Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling TWA Ceiling	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value 10 mg/m3 10 mg/m3 2 mg/m3 2 mg/m3 Value 101,2 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL	50 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value 10 mg/m3 10 mg/m3 2 mg/m3 2 mg/m3 Value 101,2 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol	STEL TWA Maximum allowable concentrat il 2006. Including Appendixes I Type Ceiling Ceiling TWA Ceiling mits Type	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substa No.1, 2, 3 and 4. Value 10 mg/m3 10 mg/m3 2 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes il Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substate No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substate No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes il Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Lin Components 2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL TWA STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. In zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL TWA STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
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Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Sweden. Occupational Exposure Ethylene glycol (107-21-1)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL STEL TWA Limit Values Type STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants. No.1, 2, 3 and 4. Value 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3 20 ppm Value 200 mg/m3 30 ppm	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL TWA STEL TWA Limit Values Type	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants and 4. Value 10 mg/m3 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3 20 ppm Value 200 mg/m3 30 ppm 15 ppm	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Sweden. Occupational Exposure Ithylene glycol (107-21-1) Sweden. Occupational Exposure Ithylene glycol (107-21-1)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA Limit Values Type STEL TWA Limit Values Type STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants and 4. Value 10 mg/m3 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3 20 ppm Value 200 mg/m3 30 ppm 15 ppm 100 mg/m3	Form Aerosol Vapor and aerosol. Vapor and aerosol.
Hygiene Norm GN 2.2.5.2439-09. It zones. Executive No. 76 of 30 april Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Magnesium sulphate (7487-88-9) Spain. Occupational Exposure Line Components 2-(2-butoxyethoxy)-ethanol (112-34-5) Ethylene glycol (107-21-1) Sweden. Occupational Exposure Ethylene glycol (107-21-1)	STEL TWA Maximum allowable concentrate il 2006. Including Appendixes in Type Ceiling Ceiling TWA Ceiling mits Type STEL TWA STEL STEL TWA Limit Values Type STEL	50 mg/m3 15 mg/m3 15 mg/m3 ion (MAC) of harmful substants and 4. Value 10 mg/m3 10 mg/m3 5 mg/m3 2 mg/m3 Value 101,2 mg/m3 15 ppm 10 ppm 67,5 mg/m3 40 ppm 104 mg/m3 52 mg/m3 20 ppm Value 200 mg/m3 30 ppm 15 ppm	Form Aerosol Vapor and aerosol. Vapor and aerosol.

Type

Value

Components	Туре	Value	
		10 ppm	
Switzerland. SUVA Grenzw	verte am Arbeitsplatz		
Components	Туре	Value	
2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL	101,2 mg/m3	
	TWA	15 ppm 10 ppm 67 mg/m3	
Ethylene glycol (107-21-1)	STEL	20 ppm 52 mg/m3	
	TWA	26 mg/m3 10 ppm	
UK. EH40 Workplace Expo	sure Limits (WELs)		
Components	Туре	Value	Form
2-(2-butoxyethoxy)-ethanol (112-34-5)	STEL	15 ppm	
,	TWA	101,2 mg/m3 67,5 mg/m3 10 ppm	
Ethylene glycol (107-21-1)	STEL	104 mg/m3 40 ppm	Vapor. Vapor.
	TWA	10 mg/m3 20 ppm 52 mg/m3	Particulate. Vapor. Vapor.
ommended monitoring cedures	Follow standard monitoring procedure	es.	·
iL	Not available.		
EC .	Not available.		
osure controls			
ropriate engineering trols	Ensure adequate ventilation, especially in confined areas. Observe occupational exposure limand minimise the risk of exposure.		
vidual protection measures	s, such as personal protective equipme	ent	
General information	Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.		
Eye/face protection	Wear approved safety goggles.		
Skin protection			
- Hand protection	Wear suitable gloves. Butyl rubber gloves are recommended. Suitable gloves can be recommended by the glove supplier.		
- Other	Wear suitable protective clothing.		
Respiratory protection	In case of inadequate ventilation: Use respiratory equipment with combination filter, type A2/P		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
iene measures	Handle in accordance with good industrial hygiene and safety practices. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.		
ironmental exposure	Contain spills and prevent releases and observe national regulations on emissions. Environmental manager must be informed of all major spillages.		

Se

Information on basic physical and chemical properties

Physical state Liquid. **Form** Liquid.

> Clear pale yellow. Colour

Odour Organic. **Odour threshold** Not available. рΗ 6,5 - 8 at 20 °C Melting point/freezing -15 °C (5 °F)

point

Boiling point, initial boiling point, and boiling range

100 °C (212 °F) at 760 mmHg

Flash point > 98 °C (> 208,4 °F)

Auto-ignition temperatureNot applicable.Flammability (solid, gas)Not available.Flammability limit - lowerNot applicable.

(%)

Flammability limit - upper

(%)

Not applicable.

Oxidising properties

Explosive properties

Explosive limit

Vapour pressure

Vapour density

Evaporation rate

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Relative density 1,04

Solubility (water)

Partition coefficient

Miscible with water in all proportions.

(n-octanol/water) No data available.

Decomposition

temperature Not available.

Viscosity

Percent volatile 6 cSt

Other data Not available.

Flammability

Other information Not applicable.

No relevant additional information available.

Section 10: Stability and reactivity

ReactivityThe product is stable and non reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

Hazardous polymerisation does not occur.

Conditions to avoid Contact with incompatible materials. Excessive heat. Freezing (Product properties are

unaffected).

Incompatible materials Alkali metals. Strong oxidising agents. Water reactive materials.

Hazardous decomposition

products

Carbon oxides. Sulphur oxides. Hydrogen fluoride. Metal oxides. Nitrogen oxides (NOx).

Section 11: Toxicological information

General informationThe information in this section is for the individual ingredients that are expected to contribute to

the potential health effects of this product.

Information on likely routes of exposure

Ingestion May be harmful if swallowed.

Inhalation May cause mild central nervous system effects.

Skin contact May cause skin irritation.

Eye contact Causes serious eye irritation.

Symptoms Exposed may experience eye tearing, redness, and discomfort. Symptoms may include redness,

drying and cracking of the skin. Symptoms of overexposure may be headache, dizziness,

tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity Harmful if swallowed. May cause eye irritation.

Components	Test results	
Ethylene glycol (107-21-1)	Acute Dermal LD50 Rabbit: 9530 mg/kg	
	Acute Oral LD50 Rat: 5,89 g/kg	
2-(2-butoxyethoxy)-ethanol (112-34-5)	Acute Dermal LD50 Rabbit: 2700 mg/kg	
	Acute Oral LD50 Rat: 4500 mg/kg	
Cocoamido propyl betaine (61789-40-0)	Acute Oral LD50 Rat: 4900 mg/kg	

Tridol S3 LT SDS EU

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Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye Causes serious eye irritation.

irritation

Respiratory sensitisationNo data available.Skin sensitisationNot a skin sensitiser.Germ cell mutagenicityNo data available.

Carcinogenicity Not listed.

Reproductive toxicity May cause harm to the unborn child.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated

No data available.

exposure

NO data avallable

Aspiration hazard

No data available.

Mixture versus substance

Other information

Not known.

information

Persons with pre-existing skin disorders may be more susceptible to the effects of the product.

Section 12: Ecological information

Toxicity

Components	Test results
Ethylene glycol (107-21-1)	LC50 Fathead minnow (Pimephales promelas): 8050 mg/l 96 hours
Magnesium sulphate (7487-88-9)	EC50 Tubificid worm (Tubifex tubifex): 149,6 - 191,36 mg/l 48 hours
	LC50 Fathead minnow (Pimephales promelas): 2610 - 3080 mg/l 96 hours

Persistence and The product is biodegradable. COD: 0,77gg-1 BOD: 56% / 7 days. BOD: 78% / 14 days. BOD:

degradability 83% / 21 days. BOD: 85% / 28 days.

Bioaccumulative potential The product is not expected to bioaccumulate.

Mobility The product is water soluble and may spread in water systems.

Environmental fate - Partition coefficient

No data available.

Mobility in soil No data available.

Results of PBT and Not a PBT or vPvB substance or mixture.

vPvB assessment
Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13: Disposal considerations

Waste treatment methods

Residual waste Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging Dispose of in accordance with local regulations. Empty containers should be taken to an approved

waste handling site for recycling or disposal.

EU waste code16 03 05* Waste codes should be assigned by the user based on the application for which the

product was used.

Disposal methods/information Dispose of waste and residues in accordance with local authority requirements.

Section 14: Transport information

ADR

The product is not covered by international regulation on the transport of dangerous goods.

RID

The product is not covered by international regulation on the transport of dangerous goods.

ADN

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available.

Section 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registery (EPER)

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Not listed.

Other regulations The product is classified and labelled in accordance with EC directives or respective national

laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations Not available.

Chemical safety assessment No Chemical Safety Assessment has been carried out.

Section 16: Other information

List of abbreviations DNEL: Derived No-Effect Level. PNEC: Predicted No-Effect Concentration. PBT: Persistent,

bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative.

References US. IARC Monographs on Occupational Exposures to Chemical Agents

EPA: Acquire database

NLM: Hazardous Substances Data Base

ACGIH

Information on evaluation method leading to the classification of mixture

The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if

available. For details, refer to Sections 9, 11 and 12.

Full text of any statements or R-phrases and H-phrases under Sections 2 to 15 R22 Harmful if swallowed. R36 Irritating to eyes.

R41 Risk of serious damage to eyes. R50 Very toxic to aquatic organisms.

H302 - Harmful if swallowed.

H318 - Causes serious eye damage. H319 - Causes serious eye irritation. H400 - Very toxic to aquatic life.

Training information

Follow training instructions when handling this material.

Disclaimer

This information is based on our current knowledge and is believed to be correct as of the date issued. The information is intended to describe the product for the purposes of health, safety and environmental requirements only and no warranty, express or implied, is made. It should also not be construed as guaranteeing any specific property of the product. In addition, information obtained from a database is subject to change and may not be as current as the information in the

MSDS available directly from Angus Fire.