

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 28/02/2011 Revision date: 17/03/2023 Supersedes version of: 16/04/2021

Version: 3.0

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

1.1. Product identifier

Product form : Mixture
Product name : Expandol

UFI : CE31-U0EC-8007-NT6M

Product code : FC 04 01

Type of product : Firefighting foam concentrate (High-Ex)

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Firefighting foam concentrate

Uses advised against No additional information available

1.3. Details of the supplier of the safety data sheet

ANGUS FIRE Ltd Station Road LA2 7NA Bentham - United Kingdom T +44(0) 1524 264000 - F +44(0)1524 264180 general.enquiries@angus.co.uk - www.angusfire.co.uk

1.4. Emergency telephone number

Emergency number : +44(0) 1524 264000 (Standard office hours: Monday to Friday 8:30am - 4:30pm GMT)

Contact person: EH&S Manager

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection, protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of water

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

17/03/2023 EN (English) 1/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P332+P313 - If skin irritation occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

Other hazards 2.3

PBT: not relevant - no registration required vPvB: not relevant - no registration required

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-butoxyethanol substance with national workplace exposure limit(s) (BE, FR, GB, NL); substance with a Community workplace exposure limit	(CAS-No.) 111-76-2 (EC-No.) 203-905-0 (EC Index-No.) 603-014-00-0 (REACH-no) 01-2119475108-36	10 – 25	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Sodium laureth sulphate	(CAS-No.) 68891-38-3 (EC-No.) 500-234-8 (REACH-no) 01-2119488639-16	4 – 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
Butanedioic acid, 2(or 3)-sulfo-, 4-[2-[(1-oxododecyl)amino]ethyl] ester, sodium salt	(CAS-No.) 75081-73-1 (EC-No.) 939-648-2 (REACH-no) 01-2119980061-44	1 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
1-dodecanol	(CAS-No.) 112-53-8 (EC-No.) 203-982-0 (REACH-no) 01-2119485976-15	1 – 4	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
1-tetradecanol	(CAS-No.) 112-72-1 (EC-No.) 204-000-3 (REACH-no) 01-2119485910-33	0.1 – 1	Eye Irrit. 2, H319 Aquatic Chronic 1, H410

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Sodium laureth sulphate	(CAS-No.) 68891-38-3 (EC-No.) 500-234-8 (REACH-no) 01-2119488639-16	(5 ≤C < 10) Eye Irrit. 2, H319 (10 ≤C < 100) Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

First-aid measures after inhalation

Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

: Allow affected person to breathe fresh air. Allow the victim to rest. First-aid measures after skin contact : Wash with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs:

Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Causes skin irritation. Symptoms/effects after eye contact : Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : No specific measures are necessary. This product is a fire extinguishing medium.

17/03/2023 EN (English) 2/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Unsuitable extinguishing media : Not applicable.

Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Advice for firefighters 5.3.

Firefighting instructions : Not applicable. Protection during firefighting : Not applicable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders 6.1.2.

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

6.2. **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

Reference to other sections

8. Exposure controls/personal protection. 13. Disposal considerations.

SECTION 7: Handling and storage

Precautions for safe handling

: Avoid contact with skin and eyes. Wear recommended personal protective equipment. Read Precautions for safe handling and follow manufacturer's recommendations. Handle in accordance with good industrial

hygiene and safety procedures. Read and follow the Safety Data Sheet (SDS) before use.

Hygiene measures : Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store in original container. Keep container tightly closed. Store at temperatures not exceeding Storage conditions 60°C (140°F) (intermittent). Protect from sunlight. Protect from freezing. Keep/Store away from

incompatible materials.

Specific end use(s)

Firefighting foam concentrate.

SECTION 8: Exposure controls/personal protection

Control parameters

2-butoxyethanol (111-76-2)		
EU	IOEL TWA	98 mg/m³
EU	IOEL TWA [ppm]	20 ppm
EU	IOEL STEL	246 mg/m³
EU	IOEL STEL [ppm]	50 ppm
Belgium	OEL TWA	98 mg/m³
Belgium	OEL TWA [ppm]	20 ppm
Belgium	OEL STEL	246 mg/m³
Belgium	OEL STEL [ppm]	50 ppm
France	VME (OEL TWA)	49 mg/m ³
France	VME (OEL TWA) [ppm]	10 ppm
France	VLE (OEL C/STEL)	246 mg/m³
France	VLE (OEL C/STEL) [ppm]	50 ppm
Netherlands	TGG-8u (OEL TWA)	100 mg/m³
Netherlands	TGG-8u (OEL TWA) [ppm]	20 ppm
Netherlands	TGG-15min (OEL STEL)	246 mg/m³
Netherlands	TGG-15min (OEL STEL) [ppm]	50 ppm
United Kingdom	WEL TWA (OEL TWA) [1]	123 mg/m³
United Kingdom	WEL TWA (OEL TWA) [2]	25 ppm
United Kingdom	WEL STEL (OEL STEL)	246 mg/m³

17/03/2023 EN (English) 3/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2-butoxyethanol (111-76-2)		
United Kingdom	WEL STEL (OEL STEL) [ppm]	50 ppm
USA - ACGIH	ACGIH OEL TWA [ppm]	20 ppm

8.2. Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation. Follow the exposure limits given on this material safety data sheet.

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Wear protective gloves (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.2 mm coating thickness

Eye protection:

Sealed safety goggles

Skin and body protection:

Wear suitable protective clothing. Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment (recommended filter type A2/P2)



Thermal hazard protection:

Wear thermal protective clothing, when necessary.

Environmental exposure controls:

Contain spills. Prevent releases. Observe national regulations on emissions. Ensure all national/local regulations are observed.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Informatio		nd chemical	

Physical state : Liquid
Colour : Colourless.
Odour : Characteristic.
Odour threshold : No data available

pH : 6-8

Relative evaporation rate (butylacetate=1) : No data available Melting point : No data available

Freezing point : -3 °C

Boiling point : No data available

Flash point : > 100 °C

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability : No data available
Vapour pressure : No data available
Relative vapour density at 20°C : No data available
Relative density : No data available

Density : 1 – 1.02

Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available

Viscosity, kinematic : 7 mm²/s

17/03/2023 EN (English) 4/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Viscosity, dynamic : No data available : No data available Explosive properties Oxidising properties : No data available Explosive limits : No data available

Other information

SECTION 10: Stability and reactivity

Reactivity

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

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

Incompatible materials. Extremely high or low temperatures.

Incompatible materials

Alkali metals. Oxidizing agent. Water reactive substances.

Hazardous decomposition products

Carbon oxides. Sulphur oxides. Nitrogen oxides (NOx). Sodium oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity	: Not classified
2-butoxyethanol (111-76-2)	
LD50 oral rat	1746 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral)
LD50 oral	1414 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Guinea pig, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat [ppm]	450 ppm (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours))
Sodium laureth sulphate (68891-38-3)	
LD50 oral rat	4100 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
1-dodecanol (112-53-8)	
LD50 oral	8000 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Oral)
LD50 dermal rabbit	8000 – 12000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 71 mg/l (1 h, Rat, Male / female, Experimental value of similar product, Inhalation (mist), 14 day(s))
1-tetradecanol (112-72-1)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	8000 mg/kg bodyweight (24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 1.5 mg/l air (1 h, Rat, Male / female, Experimental value, Inhalation (vapours))
Skin corrosion/irritation	: Causes skin irritation.
	pH: 6 – 8
Serious eye damage/irritation	: Causes serious eye irritation.
	pH: 6 – 8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

17/03/2023 EN (English) 5/10

Safety Data Sheet

STOT-single exposure

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Expandol	
Viscosity, kinematic	7 mm ² /s

: Not classified

SECTION 12: Ecological information

Sodium laureth sulphate (68891-38-3)

Persistence and degradability

1-dodecanol (112-53-8)
Persistence and degradability

1-tetradecanol (112-72-1)Persistence and degradability

ThOD

ThOD

12.1. Toxicity	
Ecology - water	: Harmful to aquatic life with long lasting effects.
Expandol	
LC50 - Fish [1]	89 mg/l (24h; Oncorhynhus mykiss)
LC50 - Fish [2]	60 mg/l (48h; Oncorhynhus mykiss)
EC50 - Crustacea [1]	37 mg/l (24h; Daphnia magna)
EC50 - Crustacea [2]	10 mg/l (48h; Daphnia magna)
2-butoxyethanol (111-76-2)	
LC50 - Fish [1]	1474 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	1550 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	911 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Sodium laureth sulphate (68891-38-3)	
LC50 - Fish [1]	7.1 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	7.4 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	27.7 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
1-dodecanol (112-53-8)	
LC50 - Fish [1]	1.01 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	0.765 mg/l (DIN 38412: German standard methods for the examination of water, waste water and sludge, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	0.66 mg/l (Equivalent or similar to OECD 201, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
1-tetradecanol (112-72-1)	
LC50 - Fish [1]	> 1 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	3.2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semistatic system, Fresh water, Experimental value)
12.2. Persistence and degradability	
Expandol	
Persistence and degradability	May cause long-term adverse effects in the environment.
Biochemical oxygen demand (BOD)	0.087 g O ₂ /g substance (5 days)
Chemical oxygen demand (COD)	0.62 g O ₂ /g substance
2-butoxyethanol (111-76-2)	
Persistence and degradability	Readily biodegradable in water.

17/03/2023 EN (English) 6/10

Biodegradable in the soil. Readily biodegradable in water.

Readily biodegradable in water.

Readily biodegradable in water.

3.09 g O₂ /g substance

3.13 g O₂ /g substance

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Expandol	
Bioaccumulative potential	The product is not expected to bioaccumulate.
2-butoxyethanol (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0.81 (Test data, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Sodium laureth sulphate (68891-38-3)	
Partition coefficient n-octanol/water (Log Pow)	0.3 (Experimental value, OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method, 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
1-dodecanol (112-53-8)	
Partition coefficient n-octanol/water (Log Pow)	5.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 2 °C)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
1-tetradecanol (112-72-1)	
BCF - Fish [1]	26 (BCFBAF v3.01, Pisces, QSAR)
Partition coefficient n-octanol/water (Log Pow)	5.5 (Experimental value, ASTM E1147, 25 °C)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
2.4. Mobility in soil	
2-butoxyethanol (111-76-2)	
Surface tension	65.03 mN/m (20 °C, 2 g/l)
Ecology - soil	Low potential for adsorption in soil.
Sodium laureth sulphate (68891-38-3)	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Surface tension	33 mN/m (25 °C, 0.07 %, BS EN 14370:2004: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.34 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.
1-dodecanol (112-53-8)	
Surface tension	31.8 mN/m (23 °C, 6.4 mg/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.71 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value
Ecology - soil	Low potential for mobility in soil.
1-tetradecanol (112-72-1)	
Surface tension	24 mN/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.53 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value
Ecology - soil	Low potential for mobility in soil.
2.5. Results of PBT and vPvB assessmen	t
Expandol	
PBT: not relevant – no registration required	
vPvB: not relevant – no registration required	
Component	
2-butoxyethanol (111-76-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Sodium laureth sulphate (68891-38-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-dodecanol (112-53-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-tetradecanol (112-72-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2.6. Other adverse effects	
Other adverse effects	: An environmental hazard cannot be excluded in the event of unprofessional handling or

17/03/2023 EN (English) 7/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Concentrate

Prevent foam concentrate from entering ground water, surface water or storm drains. Small quantities of foam concentrate may be collected on absorbents which can then be disposed of. Disposal should be made in accordance with local, state and federal regulations.

Foam/Foam Solution

Prevent foam/foam solution from entering ground water, surface water or storm drains. Small quantities of foam solution may be collected on absorbents which can then be disposed of. Disposal should be made in accordance with local, state and federal regulations.

<u>NOTE:</u> Please consult Angus Fire for additional information regarding the disposal of foam concentrates and foam solutions or visit https://angusfire.co.uk/use-discharge-and-disposal-of-firefighting-foam-products/.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 16 03 05* - organic wastes containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN numbe	r	1		'
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper	shipping name		'	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport	nazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing gr	oup		'	'
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environme	ntal hazards		'	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:

17/03/2023 EN (English) 8/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

categories set out in	mixtures fulfilling the criteria for any of the following hazard classes or a Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 sexual function and fertility or on development, 3.8 effects other than and 3.10	Expandol ; 2-butoxyethanol
	mixtures fulfilling the criteria for any of the following hazard classes or a Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Expandol

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

15.1.2. National regulations

France

Occupational diseases : RG 84 - Affections engendrées par les solvants organiques liquides à usage professionnel

Germany

Regulatory reference : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed SZW-lijst van mutagene stoffen : None of the components are listed SZW-lijst van reprotoxische stoffen : None of the components are listed

Borstvoeding

SZW-lijst van reprotoxische stoffen – : None of the components are listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – : None of the components are listed

Ontwikkeling

DenmarkRecommendations Danish Regulation

: Pregnant/breastfeeding women working with the product must not be in direct contact with the

product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Data 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.

Acute toxicity (dermal), Category 4
Acute toxicity (inhalation:dust,mist) Category 4
Acute toxicity (oral), Category 4
Hazardous to the aquatic environment – Acute Hazard, Category 1
Hazardous to the aquatic environment – Chronic Hazard, Category 1
Hazardous to the aquatic environment – Chronic Hazard, Category 2
Hazardous to the aquatic environment – Chronic Hazard, Category 3
Serious eye damage/eye irritation, Category 1
Serious eye damage/eye irritation, Category 2
Harmful if swallowed.
Harmful in contact with skin.
Causes skin irritation.
Causes serious eye damage.
Causes serious eye irritation.
Harmful if inhaled.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.
Toxic to aquatic life with long lasting effects.
Harmful to aquatic life with long lasting effects.

17/03/2023 EN (English) 9/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

-	
Skin Irrit. 2	Skin corrosion/irritation, Category 2

SDS EU (REACH Annex II) - Angus Fire

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

17/03/2023 EN (English) 10/10