SAFETY DATA SHEET



Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

CA CLEAN

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

1.1. Product identifier

: CA CLEAN Product name

Registration number REACH : Not applicable (mixture)

Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Detergent according to Regulation (EC) No 648/2004

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio* Industrielaan 5B B-2250 Olen

2 +32 14 25 76 40 +32 14 22 02 66 info@novatio.be

*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V. Industrielaan 5B B-2250 Olen **2** +32 14 85 97 37 **4** +32 14 85 97 38

info@tec7.be

1.4. Emergency telephone number 24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

ciassifica as aarige.	ous according to the c	interia or regulation (20) no 1272/2000
Class	Category	Hazard statements
Skin Corr.	category 1C	H314: Causes severe skin burns and eye damage.

2.2. Label elements



Contains: phosphoric acid; isotridecanol, ethoxylated (>1<2,5 mol EO).

Signal word Danger

H-statements

Causes severe skin burns and eve damage. H314

P-statements

P280 Wear protective gloves, protective clothing and eye protection/face protection.

P260 Do not breathe vapours/mist.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER/doctor. P310

Supplemental information

EUH208 Contains: 2-butyne-1,4-diol. May produce an allergic reaction.

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

© BIG vzw

http://www.big.be

Reason for revision: ATP8

Revision number: 0402 Product number: 48411

Publication date: 2009-06-29 Date of revision: 2018-01-05

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
phosphoric acid 01-2119485924-24	7664-38-2 231-633-2	C<5%	Met. Corr. 1; H290 Skin Corr. 1B; H314	(1)(2)(8)(10)	Constituent
2-(2-butoxyethoxy)ethanol 01-2119475104-44	112-34-5 203-961-6	C<5%	Eye Irrit. 2; H319	(1)(2)(10)	Constituent
sotridecanol, ethoxylated (>1<2,5 mol EO) 01-2119976362-32	69011-36-5 500-241-6	C<5%	Eye Dam. 1; H318 Skin Irrit. 2; H315 Aquatic Chronic 3; H412	(1)(10)	Constituent
2-butyne-1,4-diol 01-2119489899-05	110-65-6 203-788-6	C<5 %	Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 Skin Sens. 1; H317 STOT RE 2; H373 Skin Corr. 1B; H314	(1)(2)(8)	Constituent

⁽¹⁾ For H-statements in full: see heading 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water (15 minutes)/shower. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.

After eye contact:

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Do not give chemical antidote. Immediately consult a doctor/medical service.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

Caustic burns/corrosion of the skin.

After eye contact:

Corrosion of the eye tissue.

After ingestion:

 $\stackrel{-}{\text{Gastrointestinal complaints. Diarrhoea. Vomiting. Headache. Lethargy.}$

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Reason for revision: ATP8 Publication date: 2009-06-29
Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 2 / 17

⁽²⁾ Substance with a Community workplace exposure limit

⁽⁸⁾ Specific concentration limits, see heading 16

⁽¹⁰⁾ Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher. Major fire: Class B foam (alcohol-resistant), Water spray if puddle cannot expand.

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Upon combustion: formation of CO, CO2 and small quantities of phosphorus oxides.

5.3. Advice for firefighters

5.3.1 Instructions:

No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face-shield. Corrosion-proof suit. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Face-shield. Corrosion-proof suit.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Remove contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Keep container in a well-ventilated place. Protect against frost. Keep locked up. Unauthorized persons are not admitted. Keep container tightly closed. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) bases.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Indicative occupational	10 ppm
	exposure limit value)	
	Time-weighted average exposure limit 8 h (Indicative occupational	67.5 mg/m³
	exposure limit value)	

Reason for revision: ATP8 Publication date: 2009-06-29
Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 3 / 17

-(2-Butoxyethoxy)ethanol	Short time value (Indicative occupational exposure limit value)	15 ppm
	Short time value (Indicative occupational exposure limit value)	101.2 mg/m ³
rthophosphoric acid	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1 mg/m³
	Short time value (Indicative occupational exposure limit value)	2 mg/m ³
	priore time value (indicative occupational exposure innit value)	L 1116/111
elgium		1
-(2-Butoxyéthoxy)éthanol	Time-weighted average exposure limit 8 h	10 ppm
	Time-weighted average exposure limit 8 h	67.5 mg/m ³
	Short time value	15 ppm
atida alba an bantana	Short time value	101.2 mg/m ³
cide phosphorique	Time-weighted average exposure limit 8 h Short time value	1 mg/m ³ 2 mg/m ³
	onor come value	1=6/
he Netherlands	Time wished a second se	l ₇ 4
-(2-butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	7.4 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure	50 mg/m ³
	limit value)	SU HIg/III
	Short time value (Public occupational exposure limit value)	15 ppm
	Short time value (Public occupational exposure limit value)	100 mg/m ³
osforzuur	Time-weighted average exposure limit 8 h (Public occupational exposure	<u> </u>
	limit value)	
	Time-weighted average exposure limit 8 h (Public occupational exposure	1 mg/m³
	limit value)	
	Short time value (Public occupational exposure limit value)	0.49 ppm
	Short time value (Public occupational exposure limit value)	2 mg/m ³
rance		
-(2-Butoxyéthoxy)éthanol	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire	10 ppm
-(z-batoxyethoxy)ethanoi	indicative)	то рріп
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire	67.5 mg/m ³
	indicative)]
	Short time value (VRI: Valeur réglementaire indicative)	15 ppm
	Short time value (VRI: Valeur réglementaire indicative)	101.2 mg/m ³
cide phosphorique	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire	0.2 ppm
	indicative)	
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire	1 mg/m ³
	indicative)	ļ
	Short time value (VRI: Valeur réglementaire indicative)	0.5 ppm
	Short time value (VRI: Valeur réglementaire indicative)	2 mg/m³
ermany		,
-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (TRGS 900)	10 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	67 mg/m³
ut-2-in-1,4-diol	Time-weighted average exposure limit 8 h (TRGS 900)	0.1 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	0.36 mg/m ³
Orthophosphorsäure	Time-weighted average exposure limit 8 h (TRGS 900)	2 mg/m³
ıK		
-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Workplace exposure limit	10 ppm
	(EH40/2005))	
	Time-weighted average exposure limit 8 h (Workplace exposure limit	67.5 mg/m ³
	(EH40/2005))	
	Short time value (Workplace exposure limit (EH40/2005))	15 ppm
	Short time value (Workplace exposure limit (EH40/2005))	101.2 mg/m ³
rthophosphoric acid	Time-weighted average exposure limit 8 h (Workplace exposure limit	1 mg/m³
	(EH40/2005)) Short time value (Workplace exposure limit (EH40/2005))	2 mg/m³
	priore time value (vvoirplace exposure milit (EP40/2003))	<u> - 1116/111</u>
		1
		110 0000 (15)/
iethylene glycol monobutyl ether	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	10 ppm (IFV)
ISA (TLV-ACGIH) Diethylene glycol monobutyl ether hosphoric acid	Time-weighted average exposure limit 8 h (TLV - Adopted Value) Time-weighted average exposure limit 8 h (TLV - Adopted Value) Short time value (TLV - Adopted Value)	1 mg/m ³ 3 mg/m ³

8.1.2 Sampling methods

-	in a sumpling methods					
	Product name	Test	Number			
	NON-VOLATILE ACIDS (Phosphoric Acid)	NIOSH	7908			

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 4 / 17

Product name	Test	Number
o-Phosphoric Acid	NIOSH	7903
Phosphoric Acid	OSHA	ID 111
Phosphoric Acid	OSHA	ID 165SG

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL/DMEL - Workers

phosphoric acid

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	10.7 mg/m ³	
	Long-term local effects inhalation	1 mg/m³	Test data of the pure substance
	Acute local effects inhalation	2 mg/m ³	Test data of the pure substance

2-(2-butoxyethoxy)ethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	67.5 mg/m³	
	Long-term local effects inhalation	67.5 mg/m³	
	Acute local effects inhalation	101.2 mg/m ³	
	Long-term systemic effects dermal	83 mg/kg bw/dav	

isotridecanol, ethoxylated (>1<2,5 mol EO)

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	294 mg/m³	
	Long-term systemic effects dermal	2080 mg/kg bw/day	

2-butyne-1,4-diol

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	0.02 mg/m ³	
	Acute systemic effects inhalation	2 mg/m³	
	Acute local effects inhalation	2 mg/m³	
	Long-term local effects inhalation	0.02 mg/m ³	
	Long-term systemic effects dermal	0.01 mg/kg bw/day	
	Acute systemic effects dermal	4 mg/kg bw/day	

DNEL/DMEL - General population

phosphoric acid

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	4.57 mg/m ³	
	Long-term local effects inhalation	0.36 mg/m ³	
	Long-term systemic effects oral	0.1 mg/kg bw/day	

2-(2-butoxyethoxy)ethanol

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	40.5 mg/m³	
	Long-term local effects inhalation	40.5 mg/m³	
	Acute local effects inhalation	60.7 mg/m³	
	Long-term systemic effects dermal	50 mg/kg bw/day	
	Long-term systemic effects oral	5 mg/kg bw/day	

isotridecanol, ethoxylated (>1<2,5 mol EO)

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	87 mg/m³	
	Long-term systemic effects dermal	1250 mg/kg bw/day	
	Long-term systemic effects oral	25 mg/kg bw/day	

2-butyne-1,4-diol

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	0.01 mg/m ³	
	Acute systemic effects inhalation	1 mg/m³	
	Long-term local effects inhalation	0.01 mg/m ³	
	Acute local effects inhalation	1 mg/m³	
	Long-term systemic effects dermal	0.008 mg/kg bw/day	
	Acute systemic effects dermal	2 mg/kg bw/day	
	Long-term systemic effects oral	0.008 mg/kg bw/day	

PNEC

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 5 / 17

2-(2-butoxyethoxy)ethanol

Compartments	Value	Remark
Fresh water	1.1 mg/l	
Marine water	0.11 mg/l	
Aqua (intermittent releases)	11 mg/l	
STP	200 mg/l	
Fresh water sediment	4.4 mg/kg sediment dw	
Marine water sediment	0.44 mg/kg sediment dw	
Soil	0.32 mg/kg soil dw	
Food	56 mg/kg food	

isotridecanol, ethoxylated (>1<2,5 mol EO)

Compartments	Value	Remark
Fresh water	0.074 mg/l	
Salt water	0.0074 mg/l	
Aqua (intermittent releases)	0.015 mg/l	
STP	1.4 mg/l	
Fresh water sediment	0.604 mg/kg sediment dw	
Marine water sediment	0.0604 mg/kg sediment dw	
Soil	0.1 mg/kg soil dw	

2-butyne-1,4-diol

Compartments	Value	Remark
Fresh water	0.3 mg/l	
Marine water	0.03 mg/l	
Aqua (intermittent releases)	0.3 mg/l	
STP	1990 mg/l	
Fresh water sediment	1.09 mg/kg sediment dw	
Marine water sediment	0.11 mg/kg sediment dw	
Soil	0.043 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

 $Observe\ strict\ hygiene.\ Keep\ container\ tightly\ closed.\ Do\ not\ eat,\ drink\ or\ smoke\ during\ work.$

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Gloves.

Materials	Breakthrough time	Thickness
viton	> 480 minutes	0.7 mm

- materials (good resistance)

Viton.

c) Eye protection:

Face shield.

d) Skin protection:

 ${\it Corrosion-proof\ clothing.}$

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Odour	Characteristic odour
Odour threshold	No data available
Colour	No data available on colour
Particle size	Not applicable (liquid)
Explosion limits	0.85 - 24.6 vol %
Flammability	Non-flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	1 mPa.s ; 20 °C
Kinematic viscosity	1 mm²/s ; 20 °C
Melting point	0 ℃

Reason for revision: ATP8 Publication date: 2009-06-29
Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 6 / 17

Boiling point	100 °C - 261 °C
Evaporation rate	0.3 ; Butyl acetate
Relative vapour density	No data available
Vapour pressure	23 hPa ; 20 °C
Solubility	Water ; complete
Relative density	1.0; 20°C
Decomposition temperature	No data available
Auto-ignition temperature	200 °C
Flash point	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	1.2

9.2. Other information

Absolute density 1048 kg/m³; 20 °C	
------------------------------------	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Substance has acid reaction.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents, (strong) bases.

10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO2 and small quantities of phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

CA CLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

phosphoric acid

Route of exposure	Parameter	Method	Value	Exposure time		Value determination	Remark
Oral	LD50	Equivalent to OECD 423	2600 mg/kg bw			Experimental value	
Dermal	Dose level		> 2000 mg/kg bw	24 h		l '	85 % aqueous solution
Inhalation	LC50	Equivalent to OECD 403	3.846 mg/l air	1 h	Rat (male)	Read-across	

2-(2-butoxyethoxy)ethanol

Route of exposure	Parameter	Method	Value	Exposure time			Remark
						determination	
Oral		•	2410 mg/kg bw - 5530 mg/kg bw		Mouse (male)	Experimental value	
Dermal		Equivalent to OECD 402	2764 mg/kg bw		Rabbit (male)	Experimental value	
Inhalation (aerosol)	IRT (inhalation risk test)	BASF test	> 29 ppm	2 h	Mouse	Experimental value	

Reason for revision: ATP8 Publication date: 2009-06-29
Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 7 / 17

2-butyne-1,4-diol

Route of exposure	Parameter	Method	Value	Exposure time		Value determination	Remark
Oral		Equivalent to OECD 401	132 mg/kg bw		Rat (male)	Experimental value	
Oral	LD50	Equivalent to OECD 401	176 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	OECD 402	659 mg/kg bw		Rat (male/female)	Experimental value	
Inhalation (aerosol)	LC50	OECD 403	0.69 mg/l air	4 h	Rat (male/female)	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

CA CLEAN

No (test)data on the mixture available

Classification is based on the pH

phosphoric acid

Route of e	exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
							determination	
Eye		l '	Equivalent to OECD 405				1 '	75 % aqueous solution
Skin		Corrosive		24 h	24; 72 hours	Rabbit	Experimental value	80 % aqueous solution

2-(2-butoxyethoxy)ethanol

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Highly irritating	OECD 405	72 h	24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing
Skin	Slightly irritating	OECD 404		24; 48; 72 hours	Rabbit	Experimental value	

isotridecanol, ethoxylated (>1<2,5 mol EO)

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Serious eye damage	OECD 405	72 h	24; 48; 72 hours	Rabbit	Experimental value	
Skin	Irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

2-butyne-1,4-diol

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Serious eye damage	OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Corrosive	OECD 404	4 h	1; 24; 48; 72 hours	Rabbit	Experimental value	

Conclusion

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

CA CLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

phosphoric acid

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin					Data waiving	

2-(2-butoxyethoxy)ethanol

Route of exposure	Result	Method	Exposure time	Observation time	Species	Value determination	Remark
				point			
Skin		Equivalent to OECD 406		'	Guinea pig (male/female)	Experimental value	

2-butyne-1,4-diol

Route of exposure	Result	Method	Exposure time	Observation time	Species	Value determination Re	emark
				point			
Skin	Not sensitizing	OECD 406			Guinea pig (female)	Experimental value	
Skin	Sensitizing	Human observation			Human	Experimental value	

Reason for revision: ATP8 Publication date: 2009-06-29
Date of revision: 2018-01-05

 Revision number: 0402
 Product number: 48411
 8 / 17

Conclusion

Not classified as sensitizing for skin Not classified as sensitizing for inhalation

Specific target organ toxicity

CA CLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

phosphoric acid

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value
								determination
Oral (stomach	NOAEL	OECD 422	250 mg/kg		No effect	6 weeks (daily)	Rat	Experimental
tube)							(male/female)	value
Dermal								Data waiving
Inhalation (aerosol)	Dose level		10.6 mg/m³ air	Liver	Enlargement/aff		Rat	Inconclusive,
					ection of the			insufficient data
					liver			

2-(2-butoxyethoxy)ethanol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	 Value determination
Oral (drinking water)	NOAEL		250 mg/kg bw/day			/ -	Experimental value
Dermal	I -	1 '	< 200 mg/kg bw/day	Skin	J	(// -	Experimental value
Inhalation	NOAEL	OECD 413	14 ppm	Lungs	No effect	/ - (- , / /	Experimental value

2-butyne-1,4-diol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 407	1 mg/kg bw/day			/ (- /	Rat (male/female)	Experimental value
Oral (stomach tube)	LOAEL	Equivalent to OECD 407	0, 0	Liver; spleen; kidneys		/ (- /	Rat (male/female)	Experimental value
Inhalation	NOAEC systemic effects	OECD 412	25 mg/m³ air		No effect		Rat (male/female)	Experimental value
Inhalation	NOAEL local effects	OECD 412	0.5 mg/m³ air		No effect	4 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

CA CLEAN

No (test)data on the mixture available

phosphoric acid

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic	OECD 471	Bacteria (S.typhimurium)		Experimental value
activation, negative without				
metabolic activation				

2-(2-butoxyethoxy)ethanol

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic	Equivalent to OECD 476	Chinese hamster ovary (CHO)		Experimental value
activation, negative without				
metabolic activation				
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value

2-butyne-1,4-diol

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 473	Chinese hamster lung		Experimental value
		fibroblasts (V79)		
Negative	OECD 471	Bacteria (S.typhimurium)		Experimental value

Mutagenicity (in vivo)

CA CLEAN

No (test)data on the mixture available

 $\label{lem:continuous} \mbox{\bf Judgement is based on the relevant ingredients}$

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 9 / 17

phosphoric acid

Result	Method	Exposure time	Test substrate	Organ	Value determination
					Data waiving

2-(2-butoxyethoxy)ethanol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD		Mouse (male/female)		Experimental value
	475				

2-butyne-1,4-diol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474	24 h - 48 h	Mouse (male/female)		Experimental value

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

CA CLEAN

No (test)data on the mixture available
Judgement is based on the relevant ingredients

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

CA CLEAN

No (test)data on the mixture available
Judgement is based on the relevant ingredients

phosphoric acid

	Parameter	Method	Value	Exposure time	Species	Effect	- 0 -	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	. 0, 0	10 days (gestation, daily)	Rat (female)	No effect		Read-across
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	. 0, 0	10 days (gestation, daily)	Rat (female)	No effect		Read-across
Effects on fertility (Oral (stomach tube))	NOAEL (F1)	OECD 422	≥ 500 mg/kg bw/day	6 weeks (daily)	Rat (male/female)	No effect	l	Experimental value

2-(2-butoxyethoxy)ethanol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	1 '	633 mg/kg bw/day	21 days (gestation, daily)	Rat	No effect		Experimental value
Maternal toxicity	NOAEL	1 '	633 mg/kg bw/day	21 days (gestation, daily)	Rat	No effect		Experimental value
	NOAEL	Equivalent to OECD 414	1000 mg/kg bw/day	12 days (gestation, daily)	Rabbit	No effect		Experimental value
Effects on fertility	NOAEL (P)	NTP continuous breeding protocol	720 mg/kg bw/day	14 week(s)	Mouse (male/female)	No effect		Read-across

2-butyne-1,4-diol

	Parameter	Method	Value	Exposure time	Species	Effect	- 0-	Value determination
Developmental toxicity	NOAEL	OECD 414	40 mg/kg bw/day		Rat (female)			Experimental value
Maternal toxicity	NOAEL	OECD 414	40 mg/kg bw/day		Rat (female)		l	Experimental value
Effects on fertility	NOAEL	OECD 415	40 mg/kg bw/day		Rat (male/female)		l	Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

CA CLEAN

No (test)data on the mixture available

Reason for revision: ATP8 Publication date: 2009-06-29
Date of revision: 2018-01-05

 Revision number: 0402
 Product number: 48411
 10 / 17

Chronic effects from short and long-term exposure

CA CLEAN

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation.

SECTION 12: Ecological information

12.1. Toxicity

CA CLEAN

No (test)data on the mixture available

 $\label{lem:continuous} \mbox{\bf Judgement is based on the relevant ingredients}$

2-(2-butoxyethoxy)ethanol

12 batoxyctrioxy/ctriarior								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes		Equivalent to OECD 203	1300 mg/l	96 h	Lepomis macrochirus	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	EU Method C.2	> 100 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants		Equivalent to OECD 201	1101 mg/l	72 h	Pseudokirchnerie Ila subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro- organisms	EC10	Equivalent to OECD 209	> 1995 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

isotridecanol, ethoxylated (>1<2,5 mol EO)

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	EU Method C.1	2.5 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Read-across; GLP
Acute toxicity crustacea	EC50	EU Method C.2	1.5 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity algae and other aquatic plants	EL50	EU Method C.3	2.5 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Read-across; GLP
	NOELR	EU Method C.3	1.7 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Read-across; GLP
Long-term toxicity fish	EC20	Other	1.097 mg/l	30 day(s)	Pimephales promelas		Fresh water	QSAR; Lethal
Long-term toxicity aquatic crustacea	EC20		0.74 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR

2-butyne-1,4-diol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt	Value determination
							water	
Acute toxicity fishes	LC50	Equivalent to OECD 203	53.6 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	EPA 660/3 - 75/009	26.8 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	1058 mg/l	72 h	Scenedesmus subspicatus	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea	NOEC	OECD 211	15 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Nominal concentration
Toxicity aquatic micro- organisms	EC50	DIN 38412-8	3940 mg/l	17 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Nominal concentration

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 11 / 17

2-(2-butoxyethoxy)ethanol

n:					
Biod	egra	adatı	on 1	wate	er

Method	Value	Duration	Value determination
OECD 301C: Modified MITI Test (I)	85 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN	11 h	500000 /cm³	Estimated value

Biodegradation soil

Method	Value	Duration	Value determination
			Data waiving

Half-life water (t1/2 water)

Method	Primary degradation/mineralisation	Value determination
		Data waiving

isotridecanol, ethoxylated (>1<2,5 mol EO)

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	82 %	28 day(s)	Experimental value

2-butyne-1,4-diol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301E: Modified OECD Screening Test	91 %	19 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	3.795 h	0 /cm³	Calculated value

Half-life water (t1/2 water)

Method	Primary degradation/mineralisation	Value determination
	,	Data waiving

Conclusion

The surfactant(s) is/are biodegradable

12.3. Bioaccumulative potential

CA CLEAN

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

2-(2-butoxyethoxy)ethanol

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
					Data waiving

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		1	20 °C	Experimental value

isotridecanol, ethoxylated (>1<2,5 mol EO)

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		Ib /I	22 °C	Weight of evidence approach

2-butyne-1,4-diol

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		3.16; Fresh weight			Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		I-U /3	25 °C	Experimental value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 12 / 17

2-(2-butoxyethoxy)ethanol

(log) Koc

Parameter	Method	Value	Value determination
			Data waiving

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	0.01 %	0 %		0.32 %	99.66 %	QSAR

2-butyne-1,4-diol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	-0.302 - 0	Calculated value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.001 Pa.m³/mol		25 °C		Calculated value

Conclusion

Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

CA CLEAN

Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

2-(2-butoxyethoxy)ethanol

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

20 01 30 (separately collected fractions (except 15 01): detergents other than those mentioned in 20 01 29). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Recycle/reuse. Neutralize. Remove waste in accordance with local and/or national regulations. Treat using the best available techniques before discharge into drains or the aquatic environment.

13.1.3 Packaging/Container

No data available

SECTION 14: Transport information

Road (ADR)

14.1. UN number	
UN number	3264
14.2. UN proper shipping name	
Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
14.3. Transport hazard class(es)	
Hazard identification number	80
Class	8
Classification code	C1
14.4. Packing group	
Packing group	III
Labels	8
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	274

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 13 / 17

	Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
	Specific mention	Classified corrosive on grounds of extreme pH value
ail (F	פור)	
	I. UN number	
1	UN number	3264
	2. UN proper shipping name	pes :
	Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
	3. Transport hazard class(es)	
	Hazard identification number	80
	Class	8
	Classification code	C1
	1. Packing group Packing group	lii
	Labels	8
14.	5. Environmental hazards	
	Environmentally hazardous substance mark	no
14.6	5. Special precautions for user	
	Special provisions	274
	Limited quantities	Combination packagings: not more than 5 liters per inner packaging for
	Specific mention	liquids. A package shall not weigh more than 30 kg. (gross mass) Classified corrosive on grounds of extreme pH value
		Disassing corresponding of extreme pri value
	d waterways (ADN)	
1	L. UN number	2254
	UN number	3264
	2. UN proper shipping name Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
	3. Transport hazard class(es)	Corrosive liquid, acidic, morganic, m.o.s. (phosphoric acid)
	Class	8
	Classification code	C1
14.4	1. Packing group	
	Packing group	III
	Labels	8
1	5. Environmental hazards	
	Environmentally hazardous substance mark 5. Special precautions for user	no
	Special prevautions for user	274
	Limited quantities	Combination packagings: not more than 5 liters per inner packaging for
		liquids. A package shall not weigh more than 30 kg. (gross mass)
	Specific mention	Classified corrosive on grounds of extreme pH value
ea (I	MDG/IMSBC)	
	L. UN number	
1	UN number	3264
	2. UN proper shipping name	020.
	Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
- 1	3. Transport hazard class(es)	
	Class	8
	1. Packing group	
	Packing group	8
	Labels 5. Environmental hazards	O
1	Marine pollutant	-
	Environmentally hazardous substance mark	no
	5. Special precautions for user	·
	Special provisions	223
	Special provisions	274
	Limited quantities	Combination packagings: not more than 5 liters per inner packaging for
	Casaifia mantian	liquids. A package shall not weigh more than 30 kg. (gross mass)
	Specific mention 7. Transport in bulk according to Annex II of Marpol and the IBC Code	Classified corrosive on grounds of extreme pH value
	Annex II of MARPOL 73/78	Not applicable, based on available data
	·	ן ייטר מאַאוורמטוב, טמיבע טוו מימוומטוב עמנמ
ir (IC	CAO-TI/IATA-DGR)	
	I. UN number	1
	UN number	3264
	2. UN proper shipping name	
	Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
n for	revision: ATP8	Publication date: 2009-06-29
		Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 14 / 17

14.3. Transport hazard class(es)	
Class	8
14.4. Packing group	
Packing group	III
Labels	8
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	A3
Special provisions	A803
Limited quantities: maximum net quantity per packaging	1 L
Specific mention	Classified corrosive on grounds of extreme pH value

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture <u>European legislation:</u>

VOC content Directive 2010/75/EU

VOC content	Remark
0.19 %	
23.682 g/l	

Ingredients according to Regulation (EC) No 648/2004 and amendments

<5% non-ionic surfactants, perfumes

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

and use of certain dangerou	s substances, mixtures and articles.	
	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
phosphoric acid 2-(2-butoxyethoxy)ethanol isotridecanol, ethoxylated (>1<2,5 mol EO)	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex 1 to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage"; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordan
· 2-(2-butoxyethoxy)ethanol	2-(2-butoxyethoxy)ethanol (DEGBE)	1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight. 2. Spray paints and spray cleaners in aerosol dispensers containing DEGBE and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010. 3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that paints other than spray paints containing DEGBE in concentrations equal to or greater than 3 % by weight of that are placed on the market for supply to the general public are visibly, legibly and indelibly marked by 27 December

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 15 / 17

	12010 as follows: "Do not use in paint spraying equipment"
1	12010 as follows: "Do not use in paint spraying equipment".

National legislation Belgium

CA CLEAN

No data available

National legislation The Netherlands

CA CLEAN

Waterbezwaarlijkheid	B (4)
2-(2-butoxyethoxy)ethanol	
Huidopname (wettelijk)	2-(2-butoxyethoxylethanol: H

National legislation France

CA CLEAN

No data available

National legislation Germany

CA CLEAN	u

WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) and Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) of 18 April 2017
phosphoric acid	
TRGS900 - Risiko der Fruchtschädigung	Orthophosphorsäure; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
2-(2-butoxyethoxy)ethanol	
TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	2-(2-Butoxyethoxy)ethanol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
2-butyne-1,4-diol	
TA-Luft	5.2.5; I
TRGS900 - Risiko der Fruchtschädigung	But-2-in-1,4-diol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Sensibilisierende Stoffe	But-2-in-1,4-diol; Sh; Hautsensibilisierende Stoffe

National legislation United Kingdom

Hautresorptive Stoffe

CA CLEAN

No data available

Other relevant data

CA CLEAN

No data available

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture. \\

SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

H290 May be corrosive to metals.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

(*) INTERNAL CLASSIFICATION BY BIG

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

But-2-in-1,4-diol; H; Hautresorptiv

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration

OECD Organisation for Economic Co-operation and Development

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 16 / 17

PBT Persistent, Bioaccumulative & Toxic
PNEC Predicted No Effect Concentration
STP Sludge Treatment Process

vPvB very Persistent & very Bioaccumulative

Specific concentration limits CLP

phosphoric acid %	C ≥ 25 %	Skin Corr. 1B; H314	CLP Annex VI (ATP 0)
	10 % ≤ C < 25 %	Skin Irrit. 2; H315	CLP Annex VI (ATP 0)
	10 % ≤ C < 25 %	Eye Irrit. 2; H319	CLP Annex VI (ATP 0)
	C ≥ 20 %	Met. Corr. 1;H290	ECHA
2-butyne-1,4-diol	C ≥ 50 %	Skin Corr. 1B; H314	CLP Annex VI (ATP 0)
	25 % ≤ C < 50 %	Skin Irrit. 2; H315	CLP Annex VI (ATP 0)
	25 % ≤ C < 50 %	Eye Irrit. 2; H319	CLP Annex VI (ATP 0)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Reason for revision: ATP8 Publication date: 2009-06-29

Date of revision: 2018-01-05

Revision number: 0402 Product number: 48411 17/17