# **SAFETY DATA SHEET**

novatio

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

# **CA CLEAN**

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

#### 1.1. Product identifier

Product name	: CA CLEAN
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

#### Manufacturer of the product

Novatech International N.V. Industrielaan 5B B-2250 Olen ☎ +32 14 85 97 37 ➡ +32 14 85 97 38 info@novatech.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				
Class	Category	Hazard statements		
Skin Corr.	category 1C	H314: Causes severe skin burns and eye damage.		
Eye Dam.	category 1	H318: Causes serious eye damage.		

#### 2.2. Label elements

Contains: phosphoric acid;	isotridecanol, ethoxylated.			
Signal word	Danger			
H-statements				
H314	Causes severe skin burns and eye damage.			
P-statements				
P280	Wear protective gloves, protective clothing and eye pro	otection/face protection.		
P260	Do not breathe vapours/mist.			
P304 + P340	IF INHALED: Remove person to fresh air and keep comf	ortable for breathing.		
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contamina	ated clothing. Rinse skin with water or shower.		
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minu Continue rinsing.	ites. Remove contact lenses, if present and easy	to do.	
P310	Immediately call a POISON CENTER/doctor.			
Supplemental information				
EUH208	Contains: 2-butyne-1,4-diol. May produce an allergic reactio	n.		
	rum voor gevaarlijke stoffen vzw (BIG)	Publication date: 2009-06-29	L-en	
Technische Schoolstraat 43 A, B-2440	Geel	Date of revision: 2025-01-02	071	
http://www.big.be			239-	
© BIG vzw			.162	
Reason for revision: 2,3; 8; 11; 12; 15			878-16239-071-en	
Revision number: 600 (supersedes rev	ision 0501 of 2023-07-17)	BIG number: 48411	1/18	

#### 2.3. Other hazards

Caution! Substance is absorbed through the skin

### 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	M-factors and ATE
phosphoric acid 01-2119485924-24	7664-38-2 231-633-2	C≤5%	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Corr. 1B; H314: C≥25%, (CLP Annex VI (ATP 0)) Skin Irrit. 2; H315: 10% ≤C<25%, (CLP Annex VI (ATP 0)) Eye Irrit. 2; H319: 10% ≤C<25%, (CLP Annex VI (ATP 0))	(1)(2)(6)(10)	Constituent	
2-(2-butoxyethoxy)ethanol 01-2119475104-44	112-34-5 203-961-6	C≤3%	Eye Irrit. 2; H319	(1)(2)(10)	Constituent	
isotridecanol, ethoxylated	69011-36-5	C≤2%	Acute Tox. 4; H302 Eye Dam. 1; H318	(1)(10)	Constituent	
2-butyne-1,4-diol 01-2119489899-05	110-65-6 203-788-6	0.1% <c≤0.5%< td=""><td>Acute Tox. 3; H331 Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 Skin Sens. 1; H317 STOT RE 2; H373 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Corr. 1B; H314: C≥50%, (CLP Annex VI (ATP 0)) Skin Irrit. 2; H315: 25% ≤C&lt;50%, (CLP Annex VI (ATP 0)) Eye Irrit. 2; H319: 25% ≤C&lt;50%, (CLP Annex VI (ATP 0))</td><td>(1)(2)(10)</td><td>Constituent</td><td></td></c≤0.5%<>	Acute Tox. 3; H331 Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 Skin Sens. 1; H317 STOT RE 2; H373 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Corr. 1B; H314: C≥50%, (CLP Annex VI (ATP 0)) Skin Irrit. 2; H315: 25% ≤C<50%, (CLP Annex VI (ATP 0)) Eye Irrit. 2; H319: 25% ≤C<50%, (CLP Annex VI (ATP 0))	(1)(2)(10)	Constituent	

(1) For H- and EUH-statements in full: see section 16

(2) Substance with a Community workplace exposure limit

(c) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data (10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

#### General:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

#### After inhalation:

Remove victim into fresh air. Immediately consult a doctor/medical service.

#### After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately for 30 minutes with (lukewarm) water. Cut clothing; never remove burnt clothing from the wound. Do not give any pain medication. Consult a doctor/medical service.

#### After eye contact:

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a doctor/medical service.

#### After ingestion:

Rinse mouth with water. Immediately consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

#### 4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract.

Reason for revision: 2,3; 8; 11; 12; 15

After skin contact: Caustic burns/corrosion of the skin. After eye contact: Corrosion of the eye tissue. After ingestion: Burns to the gastric/intestinal mucosa. Possible esophageal perforation.

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

#### 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:

Use water moderately and if possible collect or contain it. Take account of toxic fire-fighting water. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Face shield (EN 166). Corrosion-proof suit (EN 14605). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

No naked flames. Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

#### 6.1.1 Protective equipment for non-emergency personnel

See section 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Face shield (EN 166). Corrosion-proof suit (EN 14605).

Suitable protective clothing

## See section 8.2

#### 6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Prevent soil and water pollution. Prevent spreading in sewers.

#### 6.3. Methods and material for containment and cleaning up

Take up liquid spill into inert 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 section 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 very strict hygiene - avoid contact. Remove contaminated clothing immediately. Keep container tightly closed. Do not discharge the waste into the drain.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1 Safe storage requirements:

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

#### 7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) bases.

#### 7.2.3 Suitable packaging material:

No data available

Reason for revision: 2,3; 8; 11; 12; 15

#### 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

<u>a) Occupational exposure limit values</u> If limit values are applicable and available these will be listed below.

FU

EU		
2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	10 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	67.5 mg/m³
	Short time value (Indicative occupational exposure limit value)	15 ppm
	Short time value (Indicative occupational exposure limit value)	101.2 mg/m <sup>3</sup>
But-2-yne-1,4-diol	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.5 mg/m³
Orthophosphoric 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/m³
Belgium		
-(2-Butoxyéthoxy)éthanol	Time-weighted average exposure limit 8 h	10 ppm
		67.5 mg/m <sup>3</sup>
	Short time value	15 ppm
		101.2 mg/m <sup>3</sup>
cide phosphorique	Short time value	101.2 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	$1 \text{ mg/m}^3$ 2 mg/m <sup>3</sup>
Put 2 ypo 1 4 dial		<u>.</u>
But-2-yne-1,4-diol	Time-weighted average exposure limit 8 h	0.5 mg/m³
The Netherlands		
e-(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 limit value)	50 mg/m³
	Short time value (Public occupational exposure limit value)	14.8 ppm
	Short time value (Public occupational exposure limit value)	100 mg/m³
But-2-yn-1,4-diol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.14 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.5 mg/m³
Fosforzuur	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.25 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1 mg/m³
	Short time value (Public occupational exposure limit value)	0.49 ppm
	Short time value (Public occupational exposure limit value)	2 mg/m³
rance		
2-(2-butoxyethoxy)éthanol	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	10 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	67.5 mg/m³
	Short time value (VRI: Valeur réglementaire indicative)	15 ppm
	Short time value (VRI: Valeur réglementaire indicative)	101.2 mg/m <sup>3</sup>
-Butyne-1,4-diol	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	0.5 mg/m <sup>3</sup>
Acide phosphorique	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	0.2 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1 mg/m³
		0.5 ppm
	Short time value (VRI: Valeur réglementaire indicative)	2 mg/m³

Reason for revision: 2,3; 8; 11; 12; 15

#### Germany

century		
2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (TRGS 900)	10 ppm <b>(1)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	67 mg/m³ <b>(1)</b>
	Summe aus Dampf und Aerosolen.	
But-2-in-1,4-diol	Time-weighted average exposure limit 8 h (TRGS 900)	0.1 ppm <b>(2)</b>
	Time-weighted average exposure limit 8 h (TRGS 900)	0.36 mg/m³ <b>(2)</b>
	Summe aus Dampf und Aerosolen.	
Orthophosphorsäure	Time-weighted average exposure limit 8 h (TRGS 900)	2 mg/m³ <b>(3)</b>

(1) UF: 1,5 (I)

(2) UF: 1 (I)

(3) Einatembare Fraktion; UF: 2 (I)

#### Austria

But-2-in-1,4-diol	Tagesmittelwert (MAK)	0.14 ppm
	Tagesmittelwert (MAK)	0.5 mg/m <sup>3</sup>
Butyldiglykol	Tagesmittelwert (MAK)	10 ppm
	Tagesmittelwert (MAK)	67.5 mg/m <sup>3</sup>
	Kurzzeitwert 15(Miw) 4x (MAK)	15 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	101.2 mg/m <sup>3</sup>
Phosphorsäure	Tagesmittelwert (MAK)	1 mg/m³
	Kurzzeitwert 15(Miw) 4x (MAK)	2 mg/m³

UΚ

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2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	67.5 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	15 ppm
	Short time value (Workplace exposure limit (EH40/2005))	101.2 mg/m <sup>3</sup>
But-2-yne-1,4-diol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.5 mg/m <sup>3</sup>
Orthophosphoric acid	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	2 mg/m <sup>3</sup>

#### Ireland

2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	10 ppm
	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	67.5 mg/m <sup>3</sup>
	Short time value (Binding occupational exposure limit values)	12 ppm
	Short time value (Binding occupational exposure limit values)	101.2 mg/m <sup>3</sup>
3ut-2-yne-1,4-diol	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	0.5 mg/m <sup>3</sup>
Orthophosphoric acid	Time-weighted average exposure limit 8 h (Binding occupational exposure limit values)	1 mg/m³
	Short time value (Binding occupational exposure limit values)	2 mg/m <sup>3</sup>

# USA (TLV-ACGIH) Diethylene glycol monobutyl ether Time-weighted average exposure limit 8 h (TLV - Adopted Value) 10 ppm (1) Phosphoric acid Time-weighted average exposure limit 8 h (TLV - Adopted Value) 1 mg/m<sup>3</sup> Short time value (TLV - Adopted Value) 3 mg/m<sup>3</sup>

(1) (IFV): Inhalable fraction and vapor

#### b) National biological limit values

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

8.1.2 Sampling methods

Product name	Test	Number
Butyl Carbitol	OSHA	2095
NON-VOLATILE ACIDS (Phosphoric Acid)	NIOSH	7908
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 Threshold values

DNEL/DMEL - Workers

Reason for revision: 2,3; 8; 11; 12; 15

ffect level (DNEL/DMEL)	Туре		Value	Remark
DNEL	Long-term s	systemic effects inhalation	10.7 mg/m <sup>3</sup>	
		, local effects inhalation	1 mg/m <sup>3</sup>	
		emic effects inhalation	2 mg/m <sup>3</sup>	
2-butoxyethoxy)ethanol	,			
ffect level (DNEL/DMEL)	Туре		Value	Remark
DNEL		local effects inhalation	67.5 mg/m <sup>3</sup>	
		effects inhalation	101.2 mg/m <sup>3</sup>	
outyne-1,4-diol				I
ffect level (DNEL/DMEL)	Туре		Value	Remark
DNEL	Long-term s	systemic effects inhalation	1.25 mg/m <sup>3</sup>	
	-	emic effects inhalation	100 mg/m <sup>3</sup>	
		local effects inhalation	0.5 mg/m <sup>3</sup>	
	-	effects inhalation	1 mg/m <sup>3</sup>	
		systemic effects dermal	0.2 mg/kg bw/day	
		emic effects dermal	6.6 mg/kg bw/day	
IEL/DMEL - General population	,			
osphoric acid				
ffect level (DNEL/DMEL)	Туре		Value	Remark
DNEL	Long-term s	systemic effects inhalation	4.57 mg/m <sup>3</sup>	
		, local effects inhalation	0.36 mg/m <sup>3</sup>	
		systemic effects oral	0.1 mg/kg bw/day	
2-butoxyethoxy)ethanol				I
ffect level (DNEL/DMEL)	Туре		Value	Remark
DNEL	Long-term s	systemic effects oral	6.25 mg/kg bw/day	
IEC			<b>I</b>	<b>I</b>
2-butoxyethoxy)ethanol				
Compartments		Value	Remark	
resh water		1.1 mg/l		
Marine water		0.11 mg/l		
resh water (intermittent release	es)	11 mg/l		
resh water sediment		4.4 mg/kg sediment dw		
Marine water sediment		0.44 mg/kg sediment dw		
Soil		0.32 mg/kg soil dw		
Dral		56 mg/kg food		
outyne-1,4-diol				
Compartments		Value	Remark	
resh water		0.015 mg/l		
Marine water		0.002 mg/l		
STP		134 mg/l		

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 very strict hygiene - avoid contact. 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:

Protective gloves against chemica	ls (EN 374).
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	Measured breakthrough time	Thickness	Protection index	Remark
viton	> 480 minutes	0.7 mm	Class 6	

c) Eye protection:
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Face shield (EN 166).

#### d) Skin protection:

Corrosion-proof clothing (EN 14605).

#### 8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

Reason for revision: 2,3; 8; 11; 12; 15

# SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical form	Liquid
Colour	Yellow
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	0 °C
Boiling point	100 °C - 261 °C
Flammability	Not classified as flammable
Explosion limits	0.85 - 24.6 vol %
Flash point	No data available in the literature
Auto-ignition temperature	200 °C
Decomposition temperature	No data available in the literature
рН	1.2
Kinematic viscosity	1 mm²/s ; 40 °C
Dynamic viscosity	1 mPa.s ; 20 °C
Solubility	Water ; complete
Log Kow	Not applicable (mixture)
Vapour pressure	23 hPa ; 20 °C
Absolute density	1048 kg/m³ ; 20 °C
Relative density	1.05 ; 20 °C
Relative vapour density	No data available in the literature
Particle size	Not applicable (liquid)

#### 9.2. Other information Evaporation rate

0.3 ; Butyl acetate

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Heating increases the fire hazard. 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 hazard classes as defined in Regulation (EC) No 1272/2008 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	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD 423	2600 mg/kg bw		Rat (female)	Experimental value	10 % aqueous solution
Oral			category 4			Literature study	
Dermal	LD50		> 2000 mg/kg bw	24 h	Rabbit	Experimental value	85 % aqueous solution
Inhalation	LC50	Equivalent to OECD 403	3.85 mg/l air	1 h	Rat (male)	Read-across	Active element

Reason for revision: 2,3; 8; 11; 12; 15

oute of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	2410 mg/kg bw - 5530 mg/kg bw		Mouse (male)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	2764 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (aerosol)	IRT (inhalation risk test)	BASF test	> 29 ppm	2 h	Rat	Experimental value	
tridecanol, ethoxylate	d						-
Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral			category 4			Literature study	
utyne-1,4-diol	1					- i	1
Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	132 mg/kg bw - 176 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	659 mg/kg bw	24 h	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

Result	Method	Exposure time	Time point	Species	Value determination	Remark
Serious eye damage	16 CFR 1500.42		24; 48; 72 hours	Rabbit	Experimental value	85 % aqueous solution
Corrosive	16 CFR 1500.41	24 h	24; 72 hours	Rabbit	Experimental value	80 % aqueous solution
anol					ł	
Result	Method	Exposure time	Time point	Species	Value determination	Remark
Highly irritating	OECD 405	72 h	24; 48; 72 hours	Rabbit	Experimental value	Single treatme with rinsing
Slightly irritating	OECD 404	1 h	24; 48; 72 hours	Rabbit	Experimental value	
ted	- <b>I</b>	- <b>-</b>		1		
Result	Method	Exposure time	Time point	Species	Value determination	Remark
Serious eye damage; category 1						
			<b>—</b>			- ·
Result	Method	Exposure time	l'ime point	Species		Remark
Serious eye damage	OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	Single treatme
Corrosive	OECD 404	4 h	1; 24; 48; 72 hours	Rabbit	Experimental value	
, ,						
	Serious eye damage Corrosive anol Result Highly irritating Slightly irritating ted Result Serious eye damage; category 1 Result Serious eye damage Corrosive	Serious eye damage       16 CFR 1500.42         Corrosive       16 CFR 1500.41         anol       If CFR 1500.41         anol       Method         Result       Method         Highly irritating       OECD 405         Slightly irritating       OECD 404         ted       Method         Serious eye damage; category 1       Method         Serious eye damage; category 1       OECD 405         Serious eye damage; category 1       OECD 405         serious eye damage, category 1       OECD 405         serious eye damage, category 1       OECD 405         serious eye damage, category 1       OECD 405         serious eye damage, corrosive       OECD 405         ns and eye damage, ng to the respiratory system	Serious eye damage16 CFR 1500.42Corrosive16 CFR 1500.4124 hanolExposure timeResultMethodExposure timeHighly irritatingOECD 40572 hSlightly irritatingOECD 4041 htedExposure timeResultMethodExposure timeSerious eye damage; category 1OECD 4052ResultMethodExposure timeSerious eye damageOECD 4052CorrosiveOECD 4051nameMethodExposure timeSerious eye damageOECD 4051Serious eye damageOECD 4044 hnameNethod4 h	Serious eye damage16 CFR 1500.4224; 48; 72 hoursCorrosive16 CFR 1500.4124 h24; 72 hoursanolImage: Corrosive16 CFR 1500.4124 h24; 72 hoursanolImage: Corrosive16 CFR 1500.4124 h24; 72 hoursanolImage: Corrosive0ECD 40572 h24; 48; 72 hoursSlightly irritatingOECD 40572 h24; 48; 72 hoursSlightly irritatingOECD 4041 h24; 48; 72 hoursTime pointSerious eye damage; category 1MethodExposure timeTime pointSerious eye 	Serious eye damage16 CFR 1500.4224; 48; 72 hoursRabbitCorrosive16 CFR 1500.4124 h24; 72 hoursRabbitanolExposure timeTime pointSpeciesHighly irritatingOECD 40572 h24; 48; 72 hoursRabbitSlightly irritatingOECD 4041 h24; 48; 72 hoursRabbitSlightly irritatingOECD 4041 h24; 48; 72 hoursRabbitSerious eye damage; category 1MethodExposure timeTime pointSpeciesResultMethodExposure timeTime pointSpeciesSerious eye damage; category 1OECD 4051; 24; 48; 72 hoursRabbitSerious eye damage; category 1OECD 4051; 24; 48; 72 hoursRabbitserious eye damageOECD 4044 h1; 24; 48; 72 hoursRabbitserious eye damageOECD 4044 h1; 24; 48; 72 hoursRabbitserious eye damageOECD 4044 h1; 24; 48; 72 hoursRabbit	Serious eye damage16 CFR 1500.4224; A8; 72 hoursRabbitExperimental valueCorrosive16 CFR 1500.4124 h24; 72 hoursRabbitExperimental valueanolResultMethodExposure timeTime pointSpeciesValue determinationHighly irritatingOECD 40572 h24; 48; 72 hoursRabbitExperimental valueSlightly irritatingOECD 4041 h24; 48; 72 hoursRabbitExperimental valueSerious eye damage; category 1MethodExposure timeTime pointSpeciesValue determinationResultMethodExposure timeTime pointSpeciesValue determinationSerious eye damage; category 1OECD 4051; 24; 48; 72 hoursRabbitExperimental valueResultMethodExposure timeTime pointSpeciesValue determinationSerious eye damage; category 1OECD 4051; 24; 48; 72 hoursRabbitExperimental valueResultMethodExposure timeTime pointSpeciesValue determinationSerious eye damageOECD 4051; 24; 48; 72 hoursRabbitExperimental valueCorrosiveOECD 4044 h1; 24; 48; 72 hoursRabbitExperimental valueSerious eye damageOECD 4044 h1; 24; 48; 72 hoursRabbitExperimental value

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

Reason for revision: 2,3; 8; 11; 12; 15

Publication date: 2009-06-29 Date of revision: 2025-01-02

Revision number: 600

Route of exposure	Result	Method	Fxpc	osure time	Observation time	Species	Value determination	Remark
	licourt	linethou	- LAP		point	·		
Skin	Not sensitizing	g Equivalent 1 406	to OECD			Guinea pig (male / female)	Experimental value	
butyne-1,4-diol		•						
Route of exposure	Result	Method	Expo		Observation time	Species	Value determination	Remark
Skin	Not sensitizin	g OECD 406				Guinea pig (female)	Experimental value	
Skin	Sensitizing	Human obs	ervation			Human	Experimental value	
clusion ot classified as sensit ot classified as sensit ot classified as sensit	tizing for inhal	ation						
EAN o (test)data on the n dgement is based or hosphoric acid								
Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	LOAEL	Subchronic toxicity test	155 mg/kg bw/day	Kidney (affection of the renal tissue)	90 day(s)	Rat (male / female)	Experimental value of similar product	
Oral (stomach tube)	NOAEL	OECD 422	250 mg/kg	No effect	6 week(s) - 7 week(s)	Rat (male / female)	Experimental value	Test data of th pure substance
Dermal							Data waiving	
Inhalation (aeroso	l) Dose level		10.6 mg/m <sup>3</sup> a	ir Liver (enlargemen /affection of the liver)		Rat	Experimental value	Aqueous solut
(2-butoxyethoxy)eth	nanol			•			•	
Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (drinking water)	NOAEL	OECD 408	250 mg/kg bw/day	No effect	90 days (continuous)	Rat (male / female)	Experimental value	
Dermal	NOAEL local effects	EPA TSCA consent order	< 200 mg/kg bw/day	Skin (no effect)	13 weeks (daily, 5 days / week)	female)	Experimental value	
Dermal	NOAEL systemic effects	EPA OTS 798.6050	2000 mg/kg bw/day	No adverse systemic effects	13 weeks (daily, 5 days / week)	female)	Experimental value	
Inhalation	NOAEL	OECD 413	94 mg/m³ air	Lungs (no effect)	90 days (6h / day	) Rat (male / female)	Experimental value	
butyne-1,4-diol								
Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	Equivalent to OECD 407	1 mg/kg bw/day	No effect	28 day(s)	Rat (male / female)	Experimental value	
Oral (stomach tube)	LOAEL	Equivalent to OECD 407	10 mg/kg bw/day	Liver; spleen kidneys (histopatholo		Rat (male / female)	Experimental value	

gy) NOAEC OECD 412 25 mg/m³ air Rat (male / Inhalation 4 weeks (6h / No adverse systemic systemic day, 5 days / female) effects effects week) OECD 412 Rat (male / Inhalation NOAEC 0.5 mg/m³ air Respiratory 4 weeks (6h / local tract (no day, 5 days / female) effects effect) week)

Conclusion

Not classified for subchronic toxicity

#### Mutagenicity (in vitro)

CA CLEAN

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

Reason for revision: 2,3; 8; 11; 12; 15

Publication date: 2009-06-29 Date of revision: 2025-01-02 Not applicable

Experimental

Experimental

value

value

sphoric acid Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	Effect	Experimental value	85 % aqueous solution
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes		Experimental value	85 % aqueous solution
2-butoxyethoxy)ethanol					
Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster ovary (CHO)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)		Experimental value	
utyne-1,4-diol					
Result	Method	Test substrate	Effect	Value determination	Remark
Negative	OECD 473	Chinese hamster lung fibroblasts (V79)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	

#### Mutagenicity (in vivo)

#### CA CLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

phosphoric acid

pricopriorite dela						
Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
					Data waiving	
2-(2-butoxyethoxy)ethanol						
Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (stomach	Equivalent to OECD 475		Mouse (male /	No effect	Experimental value	Single treatment
tube))			female)			
2-butyne-1,4-diol	•				•	
Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative	OECD 474	24 h - 48 h	Mouse (male /		Experimental value	
			female)			

#### **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

#### 2-butyne-1,4-diol

Route of	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
exposure								
Unknown							Data waiving	

#### **Conclusion**

Not classified for carcinogenicity

Reproductive toxicity

### <u>CA CLEAN</u>

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

Reason for revision: 2,3; 8; 11; 12; 15

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	≥ 410 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	≥ 410 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	≥ 500 mg/kg bw/day	6 week(s) - 7 week (s)	Rat (male / female)	No effect	Experimental value	

#### Category Method Value Effect Value Parameter Exposure time Species Remark determination Developmental toxicity No effect Dose level Equivalent to 633 mg/kg 21 days (gestation, Rat Experimental (Oral (diet)) OECD 414 bw/day daily) value 633 mg/kg Maternal toxicity (Oral Dose level Equivalent to 21 days (gestation, Rat No effect Experimental (diet)) OECD 414 bw/day daily) value Effects on fertility (Oral NOAEL (P) NTP 720 mg/kg 14 week(s) Mouse No effect Experimental (drinking water)) continuous bw/day (male / value breeding female) protocol

#### 2-butyne-1,4-diol

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	40 mg/kg bw/day	10 days (1x / day)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	40 mg/kg bw/day	10 days (1x / day)	Rat	No effect	Experimental value	
Effects on fertility (Oral (drinking water))	NOAEL	OECD 415	40 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

#### **Conclusion**

Not classified for reprotoxic or developmental toxicity

#### Aspiration hazard

#### CA CLEAN

Judgement is based on the relevant ingredients Not classified for aspiration toxicity

#### **Toxicity other effects**

CA CLEAN

No (test)data on the mixture available

#### Chronic effects from short and long-term exposure

CA CLEAN

Skin rash/inflammation.

#### 11.2. Information on other hazards

No evidence of endocrine disrupting properties

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

CA CLEAN

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

	Parameter	Method	Value	Duration	Species		Fresh/salt water	Value determination
Acute toxicity fishes	TLm	Equivalent to OECD 203	138 ppm	96 h	Gambusia affinis	Static system	Fresh water	Experimental value; Pure substance
Acute toxicity crustacea	EC50	OECD 202	> 100 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Pure substance
Foxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Pure substance
	NOEC	OECD 201	100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Pure substance

Reason for revision: 2,3; 8; 11; 12; 15

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinati
Acute toxicity fishes	LC50	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
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l	96 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value Nominal concentration
	NOEC	OECD 201	≥ 100 mg/l	96 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental valu Growth rate
Long-term toxicity fish	ChV		369 mg/l		Pisces			QSAR
Toxicity aquatic micro- organisms	EC10	Equivalent to OECD 209	> 1995 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental valu Respiration
otridecanol, ethoxylated		•						
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinat
Acute toxicity fishes	LC50	OECD 203	1 mg/l - 10 mg/l	96 h	Cyprinus carpio			Experimental valu
Acute toxicity crustacea	EC50	OECD 202	1 mg/l - 10 mg/l	48 h	Daphnia sp.			Experimental valu
Toxicity algae and other aquatic plants	IC50	OECD 201	1 mg/l - 10 mg/l	72 h	Desmodesmus subspicatus			Experimental valu
Long-term toxicity aquatic crustacea	NOEC	OECD 202	> 1 mg/l	21 day(s)	Daphnia magna			Experimental valu
Toxicity aquatic micro- organisms	EC10	DIN 38412-8	> 10000 mg/l	17 h	Activated sludge			Experimental valu
butyne-1,4-diol								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinat
Acute toxicity fishes	LC50	Equivalent to OECD 203	53.6 mg/l	96 h	Pimephales promelas	Flow- through system	Fresh water	Experimental valu
Acute toxicity crustacea	EC50	EPA 660/3 - 75/009	26.8 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental valu
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	1058 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental valu Nominal concentration
	EC10	Equivalent to OECD 201	346 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental valu Growth rate
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 valu Reproduction
Toxicity aquatic micro- organisms	EC50	DIN 38412-8	3940 mg/l	17 h	Pseudomonas putida	Static system	Fresh water	Experimental valu 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

2-(2-butoxyethoxy)ethanol

В	iodegradation water			
	Method	Value	Duration	Value determination
	OECD 301C	85 %; Oxygen consumption	28 day(s)	Experimental value
ico	ridocanol othoxylated			

isotridecanol, ethoxylated Biodegradation water

Bi	odegradation water			
	Method	Value	Duration	Value determination
	OECD 301B	> 60 %	28 day(s)	Experimental value

Reason for revision: 2,3; 8; 11; 12; 15

Publication date: 2009-06-29 Date of revision: 2025-01-02

#### CIEAN л

butyne-1,4-diol Biodegradation v	vater											
Method	Vater		Value				Duratior	1		l.	Value d	etermination
OECD 301E			91 %				19 day(s	)			Experim	ental value
Phototransforma	tion air (DT50	air)									•	
Method			Value				Conc. Oł	I-radicals		,	Value d	etermination
AOPWIN v1.92			3.795 h			(	) /cm³			(	Calculat	ed value
Biodegradation s	oil											
Method			Value				Duratior	1				etermination
										[	Data wa	aiving
Half-life water (t Method	1/2 water)		Value				Primary				م مراد/	etermination
Wiethou			value					tion/mine	ralisatio		value u	etermination
											Data wa	iving
<u>clusion</u> ater he surfactant(s) is <b>3. Bioaccumu</b> EAN			ording to Regula	tion (EC) f	No 648/2	004						
Kow												
ethod	R	emark		Value			Т	emperatu	e		Value	determination
			ble (mixture)					•				
nosphoric acid												
Log Kow												
Method		Remark		Va	lue			Temper	ature		Va	lue determination
		Not app	licable (mixture)	)								
(2-butoxyethoxy)	ethanol											
Log Kow												
Method		Remark		1	lue			Temper	ature			lue determination
OECD 117 otridecanol, etho	xvlated			T				20 °C			EX	perimental value
Log Kow												
Method		Remark		Va	lue			Temper	ature		Va	lue determination
				> 3	3						Lit	erature study
butyne-1,4-diol												
BCF fishes			h. 1				la .					
Parameter BCF	Method BCFBAF v	2 01	Value 3.162 l/kg; Fres		iration		Species	5				lue determination
Dei	Derbarv	5.01	weight	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Log Kow												
Method		Remark	1	Va	lue			Temper	ature		Va	lue determination
OECD 107				-0.	73			25 °C			Ex	perimental value
clusion bes not contain b 4. Mobility in (2-butoxyethoxy (log) Koc	soil	e compon	ient(s)		la a ste s				h / - 1			/
Parameter					Metho SRC PC		2.0		<b>Value</b> 0.64 - 1	0		/alue determination
log Koc Percent distribut	ion				DRC PC	KOCWIN v	2.0		10.04 - 1	.0	0	במוכעומנפט עמועפ
Method	Fraction	air I	Fraction biota	Fraction sedime		Fraction	soil	Fraction	water	Value de	etermir	ation
Mackay level I	0.01 %	(	0 %	0.01 %		0.3 %		99.7 %		QSAR		
otridecanol, etho	xylated											
(log) Koc					NA-11	-			Valu		1.	/alua datamat at
Parameter Koc					Metho	0			<b>Value</b> > 5000			/alue determination
кос log Koc					-				> 3.7			iterature study Calculated value
butyne-1,4-diol					1				r J./		P	Saloulated Value
(log) Koc												
Parameter					Metho	d			Value		<u> </u>	/alue determination
					SRC PC	KOCWIN v	2.0		-0.302 -	0	(	Calculated value
log Koc												
clusion												
	nt(s) that adso	rb(s) into	the soil									

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. Endocrine disrupting properties No evidence of endocrine disrupting properties

#### 12.7. Other adverse effects

CA CLEAN

#### Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP) Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

#### Water ecotoxicity pH

pH shift

#### phosphoric acid

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

#### 2-(2-butoxyethoxy)ethanol

Greenhouse gases Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573) Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590) Groundwater

Groundwater pollutant

#### isotridecanol, ethoxylated

Greenhouse gases Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573) Ozone-depleting potential (ODP) Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590)

#### 2-butyne-1,4-diol

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

#### 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**

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 29\* (separately collected fractions (except 15 01): detergents containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

#### 13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

### **SECTION 14: Transport information**

#### Road (ADR)

UN number	3264
4.2. UN proper shipping name	
Proper shipping name	corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
4.3. Transport hazard class(es)	
Hazard identification number	80
Class	8
Classification code	C1
4.4. Packing group	
Packing group	

	Labels	8
14.	5. Environmental hazards	
	Environmentally hazardous substance mark	no
14.	6. Special precautions for user	
	Special provisions	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

### Rail (RID)

14.1. UN number or ID number       3264         14.2. UN proper shipping name       corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)         14.2. UN proper shipping name       corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)         14.3. Transport hazard class(es)       #azard identification number         Hazard identification number       80         Class       8         Classification code       C1         14.4. Packing group       III         Packing group       8         Labels       8			
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       III         Packing group       8	4. <u>1. UN numb</u>	N number or ID number	
Proper shipping name     corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)       14.3. Transport hazard class(es)     Hazard identification number       Hazard identification number     80       Class     8       Classification code     C1       14.4. Packing group     III       Packing group     8	UN number	number	3264
14.3. Transport hazard class(es)       Hazard identification number       80       Class       Classification code       C1       14.4. Packing group       Packing group       Labels       8	4. <u>2. UN prope</u>	N proper shipping name	
Hazard identification number     80       Class     8       Classification code     C1       14.4. Packing group     III       Packing group     III       Labels     8	Proper ship	per shipping name	corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
Class     8       Classification code     C1       14.4. Packing group     III       Packing group     III       Labels     8	4. <u>3. Transport</u>	ansport hazard class(es)	
Classification code     C1       14.4. Packing group     III       Packing group     III       Labels     8	Hazard iden	ard identification number	80
14.4. Packing group Packing group III Labels 8	Class	S	8
Packing group     III       Labels     8	Classificatio	sification code	C1
Labels 8	4. <u>4. Packing g</u> r	icking group	
	Packing gro	king group	III
	Labels	els	8
14. <u>5. Environmental hazards</u>	4. <u>5. Environm</u>	vironmental hazards	
Environmentally hazardous substance mark no	Environmer	ronmentally hazardous substance mark	no
14. <u>6. Special precautions for user</u>	4. <u>6. Special pr</u>	ecial precautions for user	
Special provisions 274	Special prov	cial provisions	274
Limited quantities Combination packagings: not more than 5 liters per inner packagin	Limited qua	ted quantities	Combination packagings: not more than 5 liters per inner packaging for
liquids. A package shall not weigh more than 30 kg (gross mass).			liquids. A package shall not weigh more than 30 kg (gross mass).
Specific mention Classified corrosive on grounds of extreme pH value	Specific me	cific mention	Classified corrosive on grounds of extreme pH value

#### Inland waterways (ADN)

14.1. UN number or ID number	
UN number/ID 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)	
Class	8
Classification code	C1
14.4. Packing group	
Packing group	III
Labels	8
14. <u>5. Environmental hazards</u>	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	274
Limited quantities	Combination packagings: not more than 5 liters per inner packaging f
	liquids. A package shall not weigh more than 30 kg (gross mass).
Specific mention	Classified corrosive on grounds of extreme pH value

### Sea (IMDG/IMSBC)

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)	
Class	8
14.4. Packing group	
Packing group	111
Labels	8
14.5. Environmental hazards	
Marine pollutant	-
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	223
Special provisions	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
14.7. Maritime transport in bulk according to IMO instruments	
Annex II of MARPOL 73/78	Not applicable, based on available data
ir (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number	
n for revision: 2,3; 8; 11; 12; 15	Publication date: 2009-06-29
	Date of revision: 2025-01-02

UN number/ID number	3264
4.2. UN proper shipping name	
Proper shipping name	corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
4.3. Transport hazard class(es)	
Class	8
4.4. Packing group	
Packing group	111
Labels	8
4.5. Environmental hazards	
Environmentally hazardous substance mark	no
4.6. Special precautions for user	
Special provisions	A3
Special provisions	A803
Specific mention	Classified corrosive on grounds of extreme pH value
Passenger and cargo transport	
Limited quantities: maximum net quantity per packaging	1 L

### **SECTION 15: Regulatory information**

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

VOC content Directive 2010/75/EU

VOC content	Remark
0.191 %	
23.682 g/l	

#### Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

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

<5% non-ionic surfactants, perfumes

#### **REACH Candidate list**

Does not contain component(s) included in candidate list of substances of very high concern (SVHC) for authorisation (Article 59 of Regulation (EC) No 1907/2006)

#### **REACH Annex XIV - Authorisation**

Does not contain component(s) included in Annex XIV of Regulation (EC) No 1907/2006: list of substances subject to authorisation

#### **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.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
- phosphoric acid - 2-(2-butoxyethoxy)ethanol - isotridecanol, ethoxylated	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I 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.	<ol> <li>Shall not be used in:         <ul> <li>ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,</li> <li>tricks and jokes,</li> <li>games for one or more participants, or any article intended to be used as such, even wit ornamental aspects,</li> <li>Articles not complying with paragraph 1 shall not be placed on the market.</li> <li>Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:                 <ul> <li>can be used as fuel in decorative oil lamps for supply to the general public, and,</li></ul></li></ul></li></ol>
· 2-(2-butoxyethoxy)ethanol	2-(2-butoxyethoxy)ethanol (DEGBE)	<ol> <li>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.</li> <li>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.</li> </ol>
son for revision: 2,3; 8; 11; 12; 15		Publication date: 2009-06-29

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CA CLEAN				
		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 2010 as follows: "Do not use in paint spraying equipment".		
<ul> <li>phosphoric acid</li> <li>2-(2-butoxyethoxy)ethanol</li> <li>2-butyne-1,4-diol</li> </ul>	Substances falling within one or more of the following points: (a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008: — carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following exposure by inhalation — reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation — skin sensitiser category 1, 1A or 1B — skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2 — serious eye damage category 1 or eye irritant category 2 (b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council (c) substances listed in Annex IV to Regulation (EC) No 1223/2009 for which a condition is specified in at least one of the columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex. The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry.	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081		

National legislation Belgium CA CLEAN

No data available

### National legislation The Netherlands

<u>CA CLEAN</u>	
Waterbezwaarlijkheid	B (4); Algemene Beoordelingsmethodiek (ABM)
2-(2-butoxyethoxy)ethanol	
Huidopname (wettelijk)	2-(2-Butoxyethoxy)ethanol; H

# National legislation France <u>CA CLEAN</u>

No data available

# National legislation Germany

Lagerklasse (TRGS510)	8 A: Brennbare ätzende Gefahrstoffe
WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
nosphoric acid	
TRGS900 - Risiko der	Orthophosphorsäure; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des
Fruchtschädigung	biologischen Grenzwertes nicht befürchtet zu werden
(2-butoxyethoxy)ethanol	
TA-Luft	5.2.5
TRGS900 - Risiko der	2-(2-Butoxyethoxy)ethanol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des
Fruchtschädigung	biologischen Grenzwertes nicht befürchtet zu werden
otridecanol, ethoxylated	
TA-Luft	5.2.5
butyne-1,4-diol	
TA-Luft	5.2.5/I
TRGS900 - Risiko der	But-2-in-1,4-diol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischer
Fruchtschädigung	Grenzwertes nicht befürchtet zu werden
Sensibilisierende Stoffe	But-2-in-1,4-diol; Sh; Hautsensibilisierende Stoffe
Hautresorptive Stoffe	But-2-in-1,4-diol; H; Hautresorptiv

# National legislation Austria CA CLEAN

No data available

Reason for revision: 2,3; 8; 11; 12; 15

2-butyne-1,4-diol

Gefahr der Sensibilisierung der But-2-in-1,4-diol; Sh Haut

National legislation United Kingdom

<u>CA CLEAN</u> No data available

National legislation Ireland CA CLEAN

No data available

#### Other relevant data

CA CLEAN

No data available

#### 15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

#### SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

- H290 May be corrosive to metals.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- 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 (liver, spleen, kidneys) through prolonged or repeated exposure.

EUH208 Contains a sensitising substance. May produce an allergic reaction.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LCO	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

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. 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.

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