

SAFETY DATA SHEET

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

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +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
☎ +32 14 85 97 37
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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 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.
P310 Immediately call a POISON CENTER/doctor.

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

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)
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<http://www.big.be>
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Reason for revision: 2, 3, 8, 12, 15

Revision number: 0500

Publication date: 2009-06-29

Date of revision: 2021-12-03

BIG number: 48411

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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	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%	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

(6) 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, 12, 15

Publication date: 2009-06-29

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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:**

Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it. 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.

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 strict hygiene. 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. 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

7.2.4 Non suitable packaging material:

No data available

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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 exposure limit value)	10 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	67.5 mg/m ³
	Short time value (Indicative occupational exposure limit value)	15 ppm
	Short time value (Indicative occupational exposure limit value)	101.2 mg/m ³
But-2-yne-1,4-diol	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.5 mg/m ³
Orthophosphoric acid	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1 mg/m ³
	Short time value (Indicative occupational exposure limit value)	2 mg/m ³

Belgium

2-(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
	Short time value	101.2 mg/m ³
Acide phosphorique	Time-weighted average exposure limit 8 h	1 mg/m ³
	Short time value	2 mg/m ³
But-2-yne-1,4-diol	Time-weighted average exposure limit 8 h	0.5 mg/m ³

The Netherlands

2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	7.4 ppm
2-(2-butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	50 mg/m ³
2-(2-Butoxyethoxy)ethanol	Short time value (Public occupational exposure limit value)	15 ppm
2-(2-butoxyethoxy)ethanol	Short time value (Public occupational exposure limit value)	100 mg/m ³
But-2-yn-1,4-diol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.5 mg/m ³
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/m ³
	Short time value (Public occupational exposure limit value)	0.49 ppm
	Short time value (Public occupational exposure limit value)	2 mg/m ³

France

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/m ³
	Short time value (VRI: Valeur réglementaire indicative)	15 ppm
	Short time value (VRI: Valeur réglementaire indicative)	101.2 mg/m ³
2-Butyne-1,4-diol	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	0.5 mg/m ³
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/m ³
	Short time value (VRI: Valeur réglementaire indicative)	0.5 ppm
	Short time value (VRI: Valeur réglementaire indicative)	2 mg/m ³

Germany

2-(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/m ³
But-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

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

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Orthophosphorsäure	Time-weighted average exposure limit 8 h (TRGS 900)	2 mg/m ³
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Austria

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

UK

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

USA (TLV-ACGIH)

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

(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

phosphoric acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10.7 mg/m ³	
	Long-term local effects inhalation	1 mg/m ³	
	Acute systemic effects inhalation	2 mg/m ³	

2-(2-butoxyethoxy)ethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term local effects inhalation	67.5 mg/m ³	
	Acute local effects inhalation	101.2 mg/m ³	

2-butyne-1,4-diol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1.25 mg/m ³	
	Acute systemic effects inhalation	100 mg/m ³	
	Long-term local effects inhalation	0.5 mg/m ³	
	Acute local effects inhalation	1 mg/m ³	
	Long-term systemic effects dermal	0.2 mg/kg bw/day	
	Acute systemic effects dermal	6.6 mg/kg bw/day	

DNEL/DMEL - General population

phosphoric acid

Effect level (DNEL/DMEL)	Type	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)	Type	Value	Remark
DNEL	Long-term systemic effects oral	6.25 mg/kg bw/day	

PNEC

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

BIG number: 48411

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2-(2-butoxyethoxy)ethanol

Compartments	Value	Remark
Fresh water	1.1 mg/l	
Marine water	0.11 mg/l	
Fresh water (intermittent releases)	11 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	
Oral	56 mg/kg food	

2-butyne-1,4-diol

Compartments	Value	Remark
Fresh water	0.015 mg/l	
Marine water	0.002 mg/l	
STP	134 mg/l	
Soil	0.05 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. 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 chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
viton	> 480 minutes	0.7 mm	Class 6	

c) Eye protection:

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

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 in the literature
Colour	No data available on colour
Particle size	Not applicable (liquid)
Explosion limits	0.85 - 24.6 vol %
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	1 mPa.s ; 20 °C
Kinematic viscosity	1 mm ² /s ; 40 °C
Melting point	0 °C
Boiling point	100 °C - 261 °C
Relative vapour density	No data available in the literature
Vapour pressure	23 hPa ; 20 °C
Solubility	Water ; complete
Relative density	1.05 ; 20 °C
Absolute density	1048 kg/m ³ ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	200 °C
Flash point	No data available in the literature
pH	1.2

9.2. Other information

Evaporation rate	0.3 ; Butyl acetate
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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 determination	Remark
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/m ³	1 h	Rat (male)	Read-across	

2-(2-butoxyethoxy)ethanol

Route 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		Rabbit (male)	Experimental value	
Inhalation (aerosol)	IRT (inhalation risk test)	BASF test	> 29 ppm	2 h	Rat	Experimental value	

isotridecanol, ethoxylated

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 2000 mg/kg bw		Rat (male / female)	Experimental value	
Oral			category 4			Literature study	
Dermal	LD50		5960 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	> 1.6 mg/l	4 h	Rat (male / female)	Experimental value	(maximum achievable concentration)

2-butyne-1,4-diol

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

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

BIG number: 48411

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Not classified for acute toxicity

Corrosion/irritation

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No (test) data on the mixture available
Classification is based on the pH
phosphoric acid

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	16 CFR 1500.42		24; 48; 72 hours	Rabbit	Experimental value	85 % aqueous solution
Skin	Corrosive	16 CFR 1500.41	24 h	24; 72 hours	Rabbit	Experimental value	80 % aqueous solution

2-(2-butoxyethoxy)ethanol

Route of exposure	Result	Method	Exposure time	Time point	Species	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	1 h	24; 48; 72 hours	Rabbit	Experimental value	

isotridecanol, ethoxylated

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

2-butyne-1,4-diol

Route of exposure	Result	Method	Exposure time	Time point	Species	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.
Not classified as irritating to the respiratory system

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	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	

2-(2-butoxyethoxy)ethanol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406			Guinea pig (male / female)	Experimental value	

2-butyne-1,4-diol

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

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

CA CLEAN

phosphoric acid

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 422	250 mg/kg		No effect	54 day(s)	Rat (male / female)	Experimental value
Dermal								Data waiving
Inhalation (aerosol)	Dose level		10.6 mg/m ³ air	Liver	Enlargement/affection of the liver		Rat	Experimental value

2-(2-butoxyethoxy)ethanol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
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	Not irritating	13 weeks (daily, 5 days / week)	Rat (male / 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)	Rat (male / female)	Experimental value
Inhalation	NOAEL	OECD 413	94 mg/m ³ air	Lungs	No effect	90 days (6h / day)	Rat (male / female)	Experimental value

2-butyne-1,4-diol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
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	Histopathology	28 day(s)	Rat (male / female)	Experimental value
Inhalation	NOAEC systemic effects	OECD 412	25 mg/m ³ air		No adverse systemic effects	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation	NOAEC local effects	OECD 412	0.5 mg/m ³ air	Respiratory tract	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

Judgement is based on the relevant ingredients

phosphoric acid

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	85 % aqueous solution
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes		Experimental value	88 % aqueous solution

2-(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	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	

2-butyne-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	

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

BIG number: 48411

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Mutagenicity (in vivo)

CA CLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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 (Oral (stomach tube))	Equivalent to OECD 475		Mouse (male / female)		Experimental value

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

2-butyne-1,4-diol

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

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	Organ	Value determination
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		Read-across
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	≥ 500 mg/kg bw/day	≥ 42 days (1x / day)	Rat (male / female)	No effect		Experimental value

2-(2-butoxyethoxy)ethanol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (diet))	NOAEL	Equivalent to OECD 414	633 mg/kg bw/day	21 days (gestation, daily)	Rat	No effect		Experimental value
Maternal toxicity (Oral (diet))	NOAEL	Equivalent to OECD 414	633 mg/kg bw/day	21 days (gestation, daily)	Rat	No effect		Experimental value
Effects on fertility (Oral (drinking water))	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	Organ	Value determination
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

Toxicity other effects

CA CLEAN

No (test)data on the mixture available

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

BIG number: 48411

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CA CLEAN

Chronic effects from short and long-term exposure

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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
phosphoric acid

	Parameter	Method	Value	Duration	Species	Test design	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
Toxicity 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
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving

2-(2-butoxyethoxy)ethanol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
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; Locomotor effect
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 value; Growth rate
Long-term toxicity fish	ChV		369 mg/l		Pisces			QSAR
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; Respiration

2-butyne-1,4-diol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
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; Locomotor effect
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	1058 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Nominal concentration
	EC10	Equivalent to OECD 201	346 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; 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 value; Reproduction
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

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

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BIG number: 48411

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12.2. Persistence and degradability

2-(2-butoxyethoxy)ethanol

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C	85 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN	11 h	5E5 /cm ³	QSAR

isotridecanol, ethoxylated

Biodegradation water

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

2-butyne-1,4-diol

Biodegradation water

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

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	3.795 h	0 /cm ³	Calculated value

Biodegradation soil

Method	Value	Duration	Value determination
			Data waiving

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
			Data waiving

Conclusion

Water

The surfactant(s) is/are biodegradable according to Regulation (EC) No 648/2004

12.3. Bioaccumulative potential

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Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

phosphoric acid

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

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		232.5 l/kg	54 h - 72 h	Pimephales promelas	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		6.4	22 °C	Weight of evidence approach

2-butyne-1,4-diol

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFBAF v3.01	3.162 l/kg; Fresh weight			Estimated value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		-0.73	25 °C	Experimental value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

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2-(2-butoxyethoxy)ethanol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.642 - 1.000	Calculated value

Percent distribution

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

isotridecanol, ethoxylated

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.376 - 2.645	QSAR

2-butyne-1,4-diol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	-0.302 - 0	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. 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 517/2014)

Ozone-depleting potential (ODP)

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

Water ecotoxicity pH

pH shift

2-(2-butoxyethoxy)ethanol

Groundwater

Groundwater pollutant

isotridecanol, ethoxylated

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

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)

14.1. UN number

UN number	3264
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14.2. UN proper shipping name

Proper shipping name	corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
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Reason for revision: 2, 3, 8, 12, 15

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

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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
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

UN number	3264
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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
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

Inland waterways (ADN)

14.1. UN number

UN number	3264
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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

14.5. 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

Sea (IMDG/IMSBC)

14.1. UN number

UN number	3264
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14.2. UN proper shipping name

Proper shipping name	corrosive liquid, acidic, inorganic, n.o.s. (phosphoric acid)
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14.3. Transport hazard class(es)

Class	8
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14.4. Packing group

Packing group	III
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

CA CLEAN

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

Air (ICAO-TI/IATA-DGR)

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)	
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
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	

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.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
<ul style="list-style-type: none"> · 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.	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 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 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 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 H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
<ul style="list-style-type: none"> · 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

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

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		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 style="list-style-type: none"> · phosphoric acid · 2-(2-butoxyethoxy)ethanol · 2-butyne-1,4-diol 	<p>Substances falling within one or more of the following points:</p> <p>(a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008:</p> <ul style="list-style-type: none"> — 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 <p>(b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council</p> <p>(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.</p> <p>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.</p>	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

CA CLEAN

Waterbezwaarlijkheid	B (4); Algemene Beoordelingsmethodiek (ABM)
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2-(2-butoxyethoxy)ethanol

Huidopname (wettelijk)	2-(2-butoxyethoxy)ethanol; H
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National legislation France

CA CLEAN

No data available

National legislation Germany

CA CLEAN

Lagerklasse (TRGS510)	8 A: Brennbare ätzende Gefahrstoffe
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WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
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phosphoric acid

TRGS900 - Risiko der Fruchtschädigung	Orthophosphorsäure; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
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2-(2-butoxyethoxy)ethanol

TA-Luft	5.2.5
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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
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isotridecanol, ethoxylated

TA-Luft	5.2.5/I
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2-butyne-1,4-diol

TA-Luft	5.2.5/I
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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
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Sensibilisierende Stoffe	But-2-in-1,4-diol; Sh; Hautsensibilisierende Stoffe
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Hautresorptive Stoffe	But-2-in-1,4-diol; H; Hautresorptiv
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National legislation Austria

CA CLEAN

No data available

2-butyne-1,4-diol

Gefahr der Sensibilisierung der Haut	But-2-in-1,4-diol; Sh
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Reason for revision: 2, 3, 8, 12, 15

Publication date: 2009-06-29

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National legislation United Kingdom

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

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

Publication date: 2009-06-29

Date of revision: 2021-12-03

Revision number: 0500

BIG number: 48411

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