SAFETY DATA SHEET

novatio

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

AIRCLEAN

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

1.1. Product identifier

Product name	: AIRCLEAN
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 Air conditioning cleansing product

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 **▲** +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			
Aerosol	category 1	H222: Extremely flammable aerosol.			
Aerosol	category 1	H229: Pressurised container: May burst if heated.			
Eye Irrit.	category 2	H319: Causes serious eye irritation.			
STOT SE	category 3	H336: May cause drowsiness or dizziness.			

2.2 Label elements

2.2. Label elements			
Contains: propan-2-o			
Signal word	Danger		
H-statements	banger		
H222	Extremely flammable aerosol.		
H229	Pressurised container: May burst if heated.		
H319	Causes serious eye irritation.		
H336	May cause drowsiness or dizziness.		
P-statements			
P210	Keep away from heat, hot surfaces, sparks, op	en flames and other ignition sources. No smoking.	
P211	Do not spray on an open flame or other ignitio	n source.	
P251	Do not pierce or burn, even after use.		
Created by: Brandweerinformati	ecentrum voor gevaarlijke stoffen vzw (BIG)	Publication date: 2018-10-13	en
Technische Schoolstraat 43 A, B-	2440 Geel	Date of revision: 2023-03-22	878-16239-037- e n
http://www.big.be			39-
© BIG vzw			-162
Reason for revision: 3.2			878

P280 Wear eye protection.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

P304 + P340 P410 + P412 Supplemental information

EUH208

Contains: glyoxal. May produce an allergic reaction.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

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
propan-2-ol 01-2119457558-25	67-63-0 200-661-7	C≤60%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent	
trans-1,3,3,3-tetrafluoroprop-1-ene	29118-24-9	C≤50%	Press. Gas - Liquefied gas; H280	(1)(2)	Propellant	
glyoxal 01-2119461733-37	107-22-2 203-474-9	C≤0.5%	Muta. 2; H341 Skin Sens. 1; H317 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319	(1)(2)(10)	Constituent	
didecyldimethylammonium chloride	7173-51-5 230-525-2	C≤0.3%	Acute Tox. 3; H301 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	(1)(10)	Constituent	M: 10 (Acute, ECHA)

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

(2) Substance with a Community workplace exposure limit

(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. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. If you feel unwell, 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:

Dizziness. Drowsiness. EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression.

- After skin contact:
- No effects known.

After eye contact: Irritation of the eye tissue.

- After ingestion:
- No effects known.
- 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.

Reason for revision: 3.2

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher. Major fire: Quantities of water.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (hydrofluoric acid, carbon monoxide - carbon dioxide). Pressurised container: May burst if heated.

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistant risk of physical explosion. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034). 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

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Dam up the liquid spill.

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

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe strict hygiene.

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. Fireproof storeroom. Keep out of direct sunlight. Protect against frost. Max. storage time: > 365 day(s).

7.2.2 Keep away from:

Heat sources, ignition sources, (strong) acids, (strong) bases, oxidizing agents, reducing agents.

7.2.3 Suitable packaging material:

Aerosol

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

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

Belgium

Reason for revision: 3.2

Publication date: 2018-10-13 Date of revision: 2023-03-22

Revision number: 0101

Short time value 400 ppm Short time value 10000 mg/m (Glyoxal (vapeur et aérosol) Time-weighted average exposure limit & h 0.1 mg/m ² Alcool isopropylique Short time value (VL: Valeur non réglementaire indicative) 400 ppm Germany Propan-2-ol Time-weighted average exposure limit & h (TRGS 900) 200 ppm Germany Time-weighted average exposure limit & h (TRGS 900) 1000 ppm trans-1,3,3,3-Tetraflurorpropen Time-weighted average exposure limit & h (TRGS 900) 1000 ppm Austria 20 ppm Tagesmittelwert (MAK) 200 ppm 2,-Propanol Kurzzeitwert für Großguss Tagesmittelwert (MAK) 200 ppm Kurzzeitwert 30(MW) 4K (MAK) 200 ppm 200 ppm 2,-Propanol Tagesmittelwert (MAK) 200 ppm Kurzzeitwert 15(MW) 4K (MAK) 200 ppm 200 ppm VK Time-weighted average exposure limit & h (Workplace exposure limit 400 ppm VK Time-weighted average exposure limit & h (Workplace exposure limit 400 ppm VK Time-weighted average exposure limit & h (Workplace exposure limit 400 ppm VK Time-weig	Alcool isopropylique		Time-weighted average expo	osure limit 8 h		200 ppm
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UK Time-weighted average exposure limit & h (Workplace exposure limit (EH40/2005)) 400 ppm Imme-weighted average exposure limit & h (Workplace exposure limit (EH40/2005)) 500 ppm Short time value (Workplace exposure limit (EH40/2005)) 500 ppm Short time value (Workplace exposure limit (EH40/2005)) 500 ppm Short time value (Workplace exposure limit (EH40/2005)) 500 ppm Short time value (Workplace exposure limit & h (TLV - Adopted Value) 200 ppm Clyxal Time-weighted average exposure limit & h (TLV - Adopted Value) 200 ppm Glyxal Time-weighted average exposure limit & h (TLV - Adopted Value) 0.1 mg/m³ Di National biological limit values Time-weighted average exposure limit & h (TLV - Adopted Value) 0.1 mg/m³ VFV): Inhalable fraction and vapor D) Di National biological limit values 0.1 mg/m³ Di National biological limit values Urin: expositionsende, bzw. schichtende 25 mg/l 25 mg/l Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l 25 mg/l 22-ropanol (Acetoni) 254 mg/l 254			Kurzzeitwert 15(Miw) 4x (M	АК)		
Propan-2-ol Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) 400 ppm (/m² Imme-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) 500 ppm (/m² USA (TU-ACGIH) 200 ppm 2-propanol Time-weighted average exposure limit (EH40/2005)) 1250 mg/m² Giyoxal Time-weighted average exposure limit 8 h (TU - Adopted Value) 200 ppm Giyoxal Time-weighted average exposure limit 8 h (TU - Adopted Value) 0.1 mg/m² It limit values are applicable and available these will be listed below. 400 ppm 400 ppm Germany Propanol Urin: expositionsende, bzw. schichtende 25 mg/l Propanol 12-Sampling methods Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods Product name 1400 ISopropy/Licohol (Alcohols I) ISOPSH 1.3 Applicable limit values when using the substance or mixture as intended 1400 ISOPSH 1400 </td <td></td> <td></td> <td>Kurzzeitwert 15(Miw) 4x (M</td> <td>AK)</td> <td></td> <td>2000 mg/m</td>			Kurzzeitwert 15(Miw) 4x (M	AK)		2000 mg/m
Propan-2-ol Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) 400 ppm (/m² (EH40/2005)) Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) 500 ppm (/m² (EH40/2005)) 500 ppm (/m² (EH40/2005)) USA (TU-ACGIH) Time-weighted average exposure limit (EH40/2005)) 1250 mg/m² (EH40/2005)) USA (TU-ACGIH) Time-weighted average exposure limit 8 h (TU - Adopted Value) 200 ppm (Jm² (IV) - Adopted Value) Giyoxal Time-weighted average exposure limit 8 h (TU - Adopted Value) 0.1 mg/m² (IV) - IAdopted Value) 0.1 mg/m² (IV) - IAdopted Value) Mational biological limit values Time-weighted average exposure limit 8 h (TU - Adopted Value) 0.1 mg/m² (IV) - IAdopted Value) IIV IC) - IAdopted Value IIV IC) - IAdopt	ПК					
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Short time value (Workplace exposure limit (EH40/2005)) \$00 ppm Short time value (Workplace exposure limit 8 h (TLV - Adopted Value) 1250 mg/m 2-propanol Time-weighted average exposure limit 8 h (TLV - Adopted Value) 200 ppm Glyoxal Time-weighted average exposure limit 8 h (TLV - Adopted Value) 400 ppm Glyoxal Time-weighted average exposure limit 8 h (TLV - Adopted Value) 0.1 mg/m ³ By National biological limit values Time-weighted average exposure limit 8 h (TLV - Adopted Value) 0.1 mg/m ³ Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l Propan-2-ol (Aceton) Propan-2-ol (Aceton) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods Propan-2 of (Aceton) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods Fest Number Isopropanol (Volatile Organic compounds) NIOSH 2549 Isopropanol (Acetone) Urine: end of shift at end of workweek 5001 Isopropanol (Acetone) Isopropanol (Acetone) Isopropanol (Acetone) Isopropanol (Acetone) Isopropanol (Acetone) Isopropanol (Acetone) Isopropan			Time-weighted average expo	osure limit 8 h (Work	place exposure limit	999 mg/m ³
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USA (TLV-ACGIH) 2-propanol Time-weighted average exposure limit 8 h (TLV - Adopted Value) 200 ppm Short time value (TLV - Adopted Value) 400 ppm Glyoxal (FV): Inhalable fraction and vapor b) National biological limit values If limit values are applicable and available these will be listed below. Germany Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l Propan-2-ol (Aceton) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 2-Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 2-Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 2-Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 2-Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 2-Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 3-Sampling methods Product name Fest Number Isopropanol (Volatile Organic compounds) NIOSH 25499 Isopropyl Alcohol NIOSH 3900 Isopropyl Alcohol NIOSH 3900 Isopropyl Alcohol Acetone or mixture as intended If limit values when using the substance or mixture as intended If limit values are applicable and available these will be listed below. 1.4 Threshold values DNEL/DMEL Uong-term systemic effects inhalation S00 mg/m ³ Long-term systemic effects dermal B88 mg/kg bw/day glyoxal Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 8.9 mg/m ³ Acute local effects inha			Short time value (Workplace	e exposure limit (EH4	0/2005))	
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If limit values are applicable and available these will be listed below. Germany Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l Propan-2-ol (Aceton) Vollblut: expositionsende, bzw. schichtende 25 mg/l USA (BEI-ACGIH)	2-propanol		Short time value (TLV - Adop	oted Value)		400 ppm
If limit values are applicable and available these will be listed below. Germany Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l Propan-2-ol (Aceton) Vollblut: expositionsende, bzw. schichtende 25 mg/l USA (BEI-ACGIH)	2-propanol Glyoxal	r	Short time value (TLV - Adop	oted Value)		400 ppm
Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l Propan-2-ol (Aceton) Vollblut: expositionsende, bzw. schichtende 25 mg/l USA (BEI-ACGIH)	2-propanol Glyoxal (IFV): Inhalable fraction and vapo		Short time value (TLV - Adop	oted Value)		400 ppm
Propan-2-ol (Aceton) Urin: expositionsende, bzw. schichtende 25 mg/l Propan-2-ol (Aceton) Vollblut: expositionsende, bzw. schichtende 25 mg/l USA (BEI-ACGIH)	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values	<u>s</u>	Short time value (TLV - Adop Time-weighted average expo	oted Value)		400 ppm
USA (BEI-ACGIH) Image: Constraint of the second of th	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a	<u>s</u>	Short time value (TLV - Adop Time-weighted average expo	oted Value)		400 ppm
USA (BEI-ACGIH) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods Product name Test Number Isopropanol (Volatile Organic compounds) NIOSH 2549 Isopropyl Alcohol NIOSH 1400 Isopropyl Alcohol OSHA 3900 Isopropyl Alcohol OSHA 5001 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. 1.4 Threshold values DNEL/DMEL. Workers DYNEL/OMEL - Workers propan-2-cl Effect level (DNEL/DMEL) Type DNEL Long-term systemic effects inhalation 500 mg/m ³ glyoxal Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 2.96 mg/m ³ Acute local effects inhalation Long-term local effects inhalation 8.9 mg/m ³ Acute local effects inhalation 40 µg/m ³	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany	<u>s</u> available these will be listed b	Short time value (TLV - Adop Time-weighted average expo below.	oted Value) osure limit 8 h (TLV -		400 ppm
2-Propanol (Acetone) Urine: end of shift at end of workweek 40 mg/L Background, Nonspecific 1.2 Sampling methods	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton)	s available these will be listed b Urin: expositionsen	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende	oted Value) osure limit 8 h (TLV - 25 mg/l		400 ppm
I.2 Sampling methods Test Number Isopropanol (Volatile Organic compounds) NIOSH 2549 Isopropyl Alcohol (Alcohols I) NIOSH 1400 Isopropyl Alcohol NIOSH 3900 Isopropyl Alcohol OSHA 5001 Isopropyl Alcohol OSHA 5001 Isopropyl Alcohol OSHA 5001 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. 1.4 Threshold values DNEL/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 500 mg/m³	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton)	s available these will be listed b Urin: expositionsen	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende	oted Value) osure limit 8 h (TLV - 25 mg/l		400 ppm
Product nameTestNumberIsopropanol (Volatile Organic compounds)NIOSH2549Isopropyl Alcohol (Alcohols I)NIOSH1400Isopropyl AlcoholNIOSH3900Isopropyl AlcoholOSHA5001	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH)	s available these will be listed b Urin: expositionsen Vollblut: exposition	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende	osure limit 8 h (TLV - osure limit 8 h (TLV - 25 mg/l 25 mg/l	Adopted Value)	400 ppm 0.1 mg/m ³
Isopropyl Alcohol (Alcohols I) NIOSH 1400 Isopropyl Alcohol NIOSH 3900 Isopropyl Alcohol OSHA 5001 Isopropyl Alcohol OSHA 5001 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.	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone)	s available these will be listed b Urin: expositionsen Vollblut: exposition	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende	osure limit 8 h (TLV - osure limit 8 h (TLV - 25 mg/l 25 mg/l	Adopted Value)	400 ppm 0.1 mg/m ³
Isopropyl Alcohol NIOSH 3900 Isopropyl Alcohol OSHA 5001 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. 1.1.3 Hyperscript (Stresson (Stresso	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods	s available these will be listed b Urin: expositionsen Vollblut: exposition	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek	osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L	Adopted Value)	400 ppm 0.1 mg/m ³
Isoropyl Alcohol OSHA 5001 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. 5001 1.4 Threshold values DNEL/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 500 mg/m³ 1000 mg/m³ 1000 mg/m³ glyoxal Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 2.96 mg/m³ 1000 mg/m³ glyoxal Long-term systemic effects inhalation 2.96 mg/m³ 1000 mg/m³ DNEL Long-term systemic effects inhalation 8.9 mg/m³ 1000 mg/m³ DNEL Long-term systemic effects inhalation 40 µg/m³ 1000 mg/m³ Long-term local effects inhalation 40 µg/m³ 1000 mg/m³ 1000 mg/m³	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name	s available these will be listed b Urin: expositionsen Vollblut: exposition Urine: end of shift a	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test	osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L Number	Adopted Value)	400 ppm 0.1 mg/m ³
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. 1.4 Threshold values DNEL/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) Type Long-term systemic effects inhalation 500 mg/m³ Long-term systemic effects dermal 888 mg/kg bw/day glyoxal Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 5.00 mg/m³ glyoxal Acute local effects inhalation 2.96 mg/m³ DNEL Long-term systemic effects inhalation 8.9 mg/m³ Long-term local effects inhalation 40 µg/m³ Long-term systemic effects dermal	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic com	s available these will be listed b Urin: expositionsen Vollblut: exposition Urine: end of shift a	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH	osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L Number 2549	Adopted Value)	400 ppm 0.1 mg/m ³
If limit values are applicable and available these will be listed below. JNEL/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 500 mg/m³	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic com Isopropyl Alcohol (Alcohols I)	s available these will be listed b Urin: expositionsen Vollblut: exposition Urine: end of shift a	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH	nted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L Number 2549 1400	Adopted Value)	400 ppm 0.1 mg/m ³
I.4 Threshold values DNEL/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 500 mg/m³ 1000000000000000000000000000000000000	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic com Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol	s available these will be listed b Urin: expositionsen Vollblut: exposition Urine: end of shift a	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH	nted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 40 mg/L 2549 1400 3900	Adopted Value)	400 ppm 0.1 mg/m ³
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propan-2-ol Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 500 mg/m³ glyoxal Effect level (DNEL/DMEL) Type Value Remark DNEL Long-term systemic effects inhalation 2.96 mg/m³ DNEL Long-term systemic effects inhalation 2.96 mg/m³ DNEL Long-term systemic effects inhalation 8.9 mg/m³ DNEL Long-term local effects inhalation 8.9 mg/m³ Long-term local effects inhalation 40 µg/m³	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic com Isopropyl Alcohol Isopropyl Alcohol	Savailable these will be listed be Urin: expositionsen Vollblut: exposition Urine: end of shift a Urine: end of shift a pounds)	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended	nted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 40 mg/L 2549 1400 3900	Adopted Value)	400 ppm 0.1 mg/m ³
Effect level (DNEL/DMEL)TypeValueRemarkDNELLong-term systemic effects inhalation500 mg/m³	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic corr Isopropyl Alcohol Isopropyl Alco	Savailable these will be listed be Urin: expositionsen Vollblut: exposition Urine: end of shift a Urine: end of shift a pounds)	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended	nted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 40 mg/L 2549 1400 3900	Adopted Value)	400 ppm 0.1 mg/m ³
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Long-term systemic effects dermal 888 mg/kg bw/day glyoxal Value Remark DNEL Long-term systemic effects inhalation 2.96 mg/m³ Acute local effects inhalation 8.9 mg/m³ Long-term local effects inhalation 40 µg/m³ Long-term systemic effects dermal 6.6 mg/kg bw/day	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol 1.3 Applicable limit values when u: If limit values are applicable a 1.4 Threshold values DNEL/DMEL - Workers propan-2-ol	Savailable these will be listed be Urin: expositionsen Vollblut: expositions Urine: end of shift a upounds) Sing the substance or mixtur nd available these will be	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended	25 mg/l 25 mg/l 25 mg/l 25 mg/l 40 mg/L 2549 1400 3900 5001	Adopted Value) Background, Nonsp	400 ppm 0.1 mg/m ³
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DNEL Long-term systemic effects inhalation 2.96 mg/m³ Acute local effects inhalation 8.9 mg/m³ Long-term local effects inhalation 40 µg/m³ Long-term systemic effects dermal 6.6 mg/kg bw/day	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol Isopropyl Alcohol Effect level (DNEL/DMEL)	Savailable these will be listed be Urin: expositionsen Vollblut: expositionsen Urine: end of shift a urine: end of shift a sing the substance or mixtur ind available these will be Type Long-term systemic e	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended e listed below.	vted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 2549 1400 3900 5001 5001	Adopted Value) Background, Nonsp Background, Nonsp Remark	400 ppm 0.1 mg/m ³
Acute local effects inhalation8.9 mg/m³Long-term local effects inhalation40 µg/m³Long-term systemic effects dermal6.6 mg/kg bw/day	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol Isopropyl Alcohol Effect level (DNEL/DMEL) DNEL	Savailable these will be listed be Urin: expositionsen Vollblut: expositionsen Urine: end of shift a urine: end of shift a sing the substance or mixtur ind available these will be Type Long-term systemic e	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended e listed below.	vted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 2549 1400 3900 5001 5001	Adopted Value) Background, Nonsp Background, Nonsp Remark	400 ppm 0.1 mg/m ³
Acute local effects inhalation8.9 mg/m³Long-term local effects inhalation40 µg/m³Long-term systemic effects dermal6.6 mg/kg bw/day	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Bonel/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) DNEL glyoxal	Savailable these will be listed be Urin: expositionsem Vollblut: exposition Urine: end of shift a Urine: end of shift a urine: end of shift a sing the substance or mixtur ind available these will be Urine: end of shift a Difference of the substance or mixtur ind available these will be Long-term systemic e Long-term systemic e	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended e listed below.	vted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 2549 1400 3900 5001 5001 5001	Adopted Value) Adopted Value Background, Nonsp Background, Nonsp Remark	400 ppm 0.1 mg/m ³
Long-term systemic effects dermal 6.6 mg/kg bw/day	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic com Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Bonel/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) DNEL glyoxal Effect level (DNEL/DMEL)	Savailable these will be listed be Urin: expositionsen Vollblut: expositionsen Urine: end of shift a urine: end of shift a urine: end of shift a sing the substance or mixtur ind available these will be Long-term systemic e Long-term systemic e Ung-term systemic e	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended e listed below.	ted Value) osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 2549 1400 3900 5001 5001 5001 5001	Adopted Value) Adopted Value Background, Nonsp Background, Nonsp Remark	400 ppm 0.1 mg/m ³ (
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	2-propanol Glyoxal (IFV): Inhalable fraction and vapo b) National biological limit values If limit values are applicable and a Germany Propan-2-ol (Aceton) USA (BEI-ACGIH) 2-Propanol (Acetone) 1.2 Sampling methods Product name Isopropanol (Volatile Organic com Isopropyl Alcohol (Alcohols I) Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Isopropyl Alcohol Bonel/DMEL - Workers propan-2-ol Effect level (DNEL/DMEL) DNEL glyoxal Effect level (DNEL/DMEL)	Savailable these will be listed be Urin: expositionsem Vollblut: expositionsem Urine: end of shift a Urine: end of shift a urine: end of shift a pounds) Sing the substance or mixtur nd available these will be Long-term systemic e Long-term systemic e Acute local effects inl	Short time value (TLV - Adop Time-weighted average expo below. de, bzw. schichtende sende, bzw. schichtende at end of workweek Test NIOSH NIOSH NIOSH OSHA re as intended e listed below. ffects inhalation ffects inhalation halation	25 mg/l osure limit 8 h (TLV - 25 mg/l 25 mg/l 40 mg/L 2549 1400 3900 5001 5001 5001 5001 5001 500 888 mg/kg bw/d Value 2.96 mg/m ³ 8.9 mg/m ³	Adopted Value) Adopted Value Background, Nonsp Background, Nonsp Remark	400 ppm 0.1 mg/m ³
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Date of revision: 2023-03-22

propan-2-ol	oropan-2-ol						
Effect level (DNEL/DMEL)	Туре	Value	Remark				
DNEL	Long-term systemic effects inhalation	89 mg/m³					
	Long-term systemic effects dermal	319 mg/kg bw/day					
	Long-term systemic effects oral	26 mg/kg bw/day					
<u>glyoxal</u>							
Effect level (DNEL/DMEL)	Туре	Value	Remark				
DNEL	Long-term systemic effects inhalation	0.44 mg/m ³					
	Acute systemic effects inhalation	1.32 mg/m ³					
	Long-term local effects inhalation	10 μg/m³					
	Long-term systemic effects dermal	2.3 mg/kg bw/day					
	Long-term systemic effects oral	0.15 mg/m³					

PNEC

glyoxal			
Compartments	Value	Remark	
Fresh water	0.319 mg/l		
Marine water	0.032 mg/l		
Fresh water (intermittent releases)	1.1 mg/l		
STP	4.1 mg/l		
Fresh water sediment	0.685 mg/kg sediment dw		
Marine water sediment	0.069 mg/kg sediment dw		
Soil	6.3 mg/kg soil dw		
didecyldimethylammonium chloride			
Compartments	Value	Remark	
Fresh water	1.1 μg/l		
Marine water	0.11 μg/l		
Fresh water (intermittent releases)	0.21 μg/l		
STP	0.14 mg/l		
Fresh water sediment	61.86 mg/kg sediment dw		
Marine water sediment	6.186 mg/kg sediment dw		
Soil	1.4 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

Use spark-/explosion proof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

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).

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

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034). Head/neck protection.

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	Aerosol
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Colourless
Particle size	Not applicable (aerosol)
Explosion limits	2 - 12 vol % ; Propellant
Flammability	Extremely flammable aerosol.
Log Kow	Not applicable (mixture)
Dynamic viscosity	Not applicable (aerosol)
Kinematic viscosity	Not applicable (aerosol)

Reason for revision: 3.2

Melting point	No data available in the literature
Boiling point	-57 °C - 104 °C ; Liquid
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; complete
Relative density	0.79 ; 20 °C ; Liquid
Absolute density	790 kg/m³ ; 20 °C ; Liquid
Decomposition temperature	No data available in the literature
Auto-ignition temperature	Not applicable (aerosol)
Flash point	Not applicable (aerosol)
рН	No data available in the literature

9.2. Other information

Evaporation rate

1.3 ; Butyl acetate

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5. Incompatible materials

(strong) acids, (strong) bases, oxidizing agents, reducing agents.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (hydrofluoric acid, carbon monoxide - carbon dioxide).

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

AIRCLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5840 mg/kg bw		Rat	Experimental value	
Dermal	LD50	Equivalent to OECD 402	16400 ml/kg bw	24 h	Rabbit	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 10000 ppm	6 h	Rat (male / female)	Experimental value	
oxal		•			•		
Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	3300 mg/kg bw		Rat (male / female)	Experimental value	
							Aqueous solution
Dermal	LD50	Equivalent to OECD 402	> 2000 mg/kg	24 h	Rat (male / female)	Experimental value	
Inhalation (mist)	LC50	OECD 403	2.44 mg/l	4 h	Rat (male / female)	Experimental value	Aqueous solution

Reason for revision: 3.2

didecyldimethylammonium chloride Value Route of exposure Parameter Method Exposure time Species Value Remark determination Oral LD50 Rat (female) OECD 401 264 mg/kg bw Experimental value Dermal LD50 OECD 402 Rat (male / > 2000 mg/kg bw Experimental value female) Inhalation Data waiving

Conclusion

Not classified for acute toxicity

Corrosion/irritation

AIRCLEAN

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

propan-2-ol

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Irritating	Equivalent to OECD 405		1; 2; 3; 4; 7; 10; 14 days			Single treatment without rinsing
Skin	Not irritating		4 h	4; 24; 48; 72 hours	Rabbit	Experimental value	

glyoxal

Route of exposure	Result	Method	Exposure time	Time point	 Value determination	Remark
Eye	Irritating	Equivalent to OECD 405	24 h	24 hours		Single treatment without rinsing
Skin	Irritating	Equivalent to OECD 404	24 h	24 hours	Experimental value	

didecyldimethylammonium chloride

Ī	Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
							determination	
Γ	Eye						Data waiving	
Γ	Skin	Corrosive	OECD 404	3 minutes - 240	1; 24; 48; 72 hrs;	Rabbit	Experimental	
				minutes	7; 14 days		value	

Conclusion

Causes serious eye irritation.

Not classified as irritating to the skin

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

AIRCLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Dermal	Not sensitizing	OECD 406		Guinea pig (male / female)	Experimental value	
glyoxal						
Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin	Sensitizing	OECD 406		Guinea pig (female)	Experimental value	Aqueous solution
didecyldimethylamm	onium chloride					
Route of exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		Guinea pig (female)	Experimental value	

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

AIRCLEAN

No (test)data on the mixture available

Classification is based on the relevant ingredients

Reason for revision: 3.2

Publication date: 2018-10-13 Date of revision: 2023-03-22

Revision number: 0101

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (vapours)	NOAEC	OECD 451	5000 ppm		No adverse systemic effects	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation (vapours)	Dose level	Equivalent to OECD 403	5000 ppm	Central nervous system	Drowsiness, dizziness	6 h	Rat (male / female)	Experimental value

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (drinking water)	NOAEL	OECD 453	25 mg/kg bw/day		No adverse systemic effects	24 month(s)	Rat (male / female)	Experimental value
Dermal	NOAEL local effects	Subacute toxicity test	63 mg/kg bw/day	Skin	No effect	2 weeks (daily)	Mouse (male)	Experimental value
Dermal	NOAEL systemic effects	Subacute toxicity test	125 mg/kg bw/day	Skin	No adverse systemic effects	2 weeks (daily)	Mouse (male)	Experimental value
Inhalation (aerosol)	NOAEC	OECD 412	0.0006 mg/l air	Respiratory tract		4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation	LOAEC	OECD 412	0.0023 mg/l air	Respiratory tract		4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value

didecyldimethylammonium chloride

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL	OECD 453	27.3 mg/kg bw/day - 33.8 mg/kg bw/day		No effect	52 week(s)	Rat (male / female)	Experimental value
Oral (diet)	LOAEL	OECD 453	55.4 mg/kg bw/day - 69.5 mg/kg bw/day		Body weight gain	52 week(s)	Rat (male / female)	Experimental value
Dermal								Data waiving
Inhalation								Data waiving

Conclusion

May cause drowsiness or dizziness. Not classified for subchronic toxicity

Mutagenicity (in vitro)

AIRCLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients propan-2-ol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation xal	Equivalent to OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value	
Result	Method	Test substrate	Effect	Value determination	Remark
Ambiguous	OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value	Aqueous solution
Positive with metabolic activation, positive without metabolic activation	OECD 471	Bacteria (S.typhimurium)	Increased number of mutant colonies	Experimental value	Aqueous solution

Reason for revision: 3.2

Publication date: 2018-10-13 Date of revision: 2023-03-22

Revision number: 0101

idecyldimethylammonium ch	loride				
Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes		Experimental value	

Mutagenicity (in vivo)

AIRCLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

	Result	Method	Exposure time	Test substrate	Organ	Value determination
	Negative (Intraperitoneal)	Equivalent to OECD		Mouse (male / female)		Experimental value
		474				
gly	oxal					
	Result	Method	Exposure time	Test substrate	Organ	Value determination
	Negative (Oral (stomach tube))	OECD 486		Rat (male / female)		Experimental value
<u>did</u>	ecyldimethylammonium chloride					
	Result	Method	Exposure time	Test substrate	Organ	Value determination
	Negative (Oral (stomach tube))	OECD 486		Rat (male)		Experimental value
Conc	lusion				-	

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

AIRCLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients propan-2-ol

propan-z-oi								
Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure								
Inhalation	NOEL	OECD 451	5000 ppm	104 weeks (6h / day,	Rat (male /	No carcinogenic		Experimental value
(vapours)				5 days / week)	female)	effect		
glyoxal								
Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure							-	
Oral	NOAEL	OECD 453	> 300 mg/kg	24 month(s)	Rat (male /	No carcinogenic		Experimental value
(drinking			bw/day		female)	effect		
water)								
didecyldimethyl	ammonium chl	<u>oride</u>						
Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure								
Oral (diet)	Dose level	OECD 453	55.4 mg/kg	104 week(s)	Rat (male /	No carcinogenic		Experimental value
			bw/day -		female)	effect		
			69.5 mg/kg					
			bw/day					

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

AIRCLEAN

No (test)data on the mixture available

Judgement is based on the relevant ingredients

propan-2-ol

	Parameter	Method	Value	Exposure time	Species	Effect	- 0-	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL		400 mg/kg bw/day	10 day(s)	Rat	No effect		Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL		400 mg/kg bw/day	10 day(s)	Rat	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL		853 mg/kg bw/day		Rat (male / female)	No effect		Experimental value

Reason for revision: 3.2

glyoxal								
	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	125 mg/kg bw/day	14 day(s)	Rat	No effect		Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	25 mg/kg bw/day	14 day(s)	Rat	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL	OECD 416	400 mg/kg bw/day		Rat (male / female)	No effect		Experimental value
didecyldimethylammonium	chloride							
	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	12 mg/kg bw/day	23 days (gestation, daily)	Rabbit	No effect		Experimental value
Maternal toxicity (Oral	NOAEL	OECD 414	4 mg/kg	23 days (gestation,	Rabbit	No effect		Experimental

daily)

Rat (male /

female)

No effect

bw/day

1500 ppm

OECD 416

(diet))

Conclusion

(stomach tube))

Effects on fertility (Oral

Not classified for reprotoxic or developmental toxicity

NOAEL

Aspiration hazard

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

Toxicity other effects

<u>AIRCLEAN</u>

No (test)data on the mixture available

Chronic effects from short and long-term exposure

AIRCLEAN

Skin rash/inflammation.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

AIRCLEAN

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients propan-2-ol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	9640 mg/l - 10000 mg/l	96 h	Pimephales promelas	Flow- through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	LC50	Equivalent to OECD 202	> 10000 mg/l	24 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	Toxicity threshold		1800 mg/l	7 day(s)	Scenedesmus quadricauda	Static system	Fresh water	Experimental value; Toxicity test
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea	NOEC		2344 µmol/l	16 day(s)	Daphnia magna		Fresh water	Experimental value; Growth
Toxicity aquatic micro- organisms	Toxicity threshold	Equivalent to DIN 38412/8	1050 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Toxicity test
	EC50	ISO 8192	41676 mg/l	30 minutes	Activated sludge			Experimental value

Reason for revision: 3.2

Publication date: 2018-10-13 Date of revision: 2023-03-22

Revision number: 0101

BIG number: 61121

value

value

Experimental

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determinatio
Acute toxicity fishes	LC50	DIN 38412- 15	464 mg/l - 681 mg/l	96 h	Leuciscus idus	Static system	Fresh water	Experimental value Nominal concentration
Acute toxicity crustacea	EC50	EU Method C.2	404 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value Nominal concentration
Toxicity algae and other aquatic plants	EC50	EU Method C.3	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value GLP
	NOEC	EU Method C.3	3.1 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value GLP
Long-term toxicity fish	NOEC	OECD 210	112 mg/l	34 day(s)	Pimephales promelas	Flow- through system	Fresh water	Experimental value GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	3.2 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value GLP
decyldimethylammonium chlo	<u>oride</u>							
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	0.49 mg/l	96 h	Danio rerio	Semi-static system		Experimental value Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	0.029 mg/l	48 h	Daphnia magna	Static system		Experimental value Locomotor effect
Toxicity algae and other aquatic plants	ErC50	OECD 201	0.062 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value Nominal concentration
	NOEC	OECD 201	0.013 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.021 mg/l	21 day(s)	Daphnia magna	Semi-static system		Experimental value Reproduction

Conclusion

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

12.2. Persistence and degradability

propan-2-ol

Biodegradation water			
Method	Value	Duration	Value determination
EU Method C.5	53 %; Oxygen consumption	5 day(s)	Experimental value
Phototransformation air (DT50 air)			
Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	17.668 h	1.5E6 /cm ³	Calculated value

glyoxal

giyo	JXdI			
В	iodegradation water			
	Method	Value	Duration	Value determination
	OECD 301A	90 % - 100 %; GLP	19 day(s)	Experimental value
Ρ	hototransformation air (DT50 air)			
	Method	Value	Conc. OH-radicals	Value determination
	AOPWIN	11 h	1.5E6 /cm³	Calculated value
did	ecvldimethvlammonium chloride			

didecyldimethylammonium chlorid

В	iodegradation water			
	Method	Value	Duration	Value determination
	OECD 301B	71 %; GLP	28 day(s)	Experimental value

Conclusion

Water

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

12.3. Bioaccumulative potential

AIRCLEAN

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

Reason for revision: 3.2

pro	pan-2-ol

Method	Rem	ark	Va	lue	Temper	ature		Value determination
			0.0)5	25 °C		,	Weight of evidence approac
yoxal								
Log Kow								
Method	Rem	ark	Va	lue	Temper	ature	1	Value determination
OECD 107			-1.	2	23 °C			Experimental value
decyldimethylammo	<u>onium chloride</u>							
Log Kow								
Method	Rem	ark	Va	lue	Temper	ature	•	Value determination
OECD 107			2.6	5	20 °C		I	Experimental value
clusion								
es not contain bioa	accumulative com	ponent(s)						
4. Mobility in s	oil							
opan-2-ol	011							
log) Koc								
Parameter				Method		Value		Value determination
				SRC PCKOCWIN v2.0		0.185 -	0.541	
ILOG KOC								ICalculated value
log Koc /oxal				SRC PCKOCWIN V2.0		0.105	0.541	Calculated value
voxal				SRC PCKOCWIN V2.0		0.105	0.541	Calculated value
oxal				Method		Value	0.341	Calculated value
oxal log) Koc							0.341	1
ioxal Iog) Koc Parameter Iog Koc	n			Method		Value	0.541	Value determination
ioxal Iog) Koc Parameter Iog Koc	n Fraction air	Fraction biota	Fraction	Method OECD 121	Fraction	Value 0.32	Value detern	Value determination Experimental value
oxal log) Koc Parameter log Koc Percent distribution		Fraction biota	Fraction	Method OECD 121 Fraction soil	Fraction	Value 0.32		Value determination Experimental value
iog) Koc Parameter log Koc Percent distribution Method Mackay level I	Fraction air	Fraction biota		Method OECD 121 Fraction soil	Fraction 96 %	Value 0.32		Value determination Experimental value nination
iog) Koc Parameter log Koc Percent distributior Method Mackay level I	Fraction air	Fraction biota		Method OECD 121 Fraction soil		Value 0.32	Value detern	Value determination Experimental value nination
ioxal log) Koc Parameter log Koc Percent distribution Method Mackay level I decyldimethylammo	Fraction air	Fraction biota		Method OECD 121 Fraction soil		Value 0.32	Value detern	Value determination Experimental value nination
oxal log) Koc Parameter log Koc Percent distribution Method Mackay level I lecyldimethylammo	Fraction air	Fraction biota		Method OECD 121 Fraction soil		Value 0.32	Value detern	Value determination Experimental value nination
oxal log) Koc Parameter log Koc Percent distribution Method Mackay level 1 decyldimethylammodia log) Koc	Fraction air	Fraction biota		Method OECD 121 Fraction soil		Value 0.32 water	Value detern	Value determination Experimental value nination
roxal log) Koc Parameter log Koc Percent distribution Method Mackay level 1 decyldimethylammo log) Koc Parameter log Koc	Fraction air 4 % onium chloride	Fraction biota		Method OECD 121 Fraction soil		Value 0.32 water Value	Value detern	Value determination Experimental value nination Ilue Value determination
Yoxal (log) Koc Parameter log Koc Percent distribution Method Mackay level 1 decyldimethylammo (log) Koc Parameter	Fraction air 4 % onium chloride	Fraction biota		Method OECD 121 Fraction soil Method Fraction soil		Value 0.32 water Value 4.2	Value detern	Value determination Experimental value nination alue Value determination Calculated value

Conclusion

Level III

Contains component(s) that adsorb(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

AIRCLEAN

Greenhouse gases

Contains component(s) included in the list of substances which may contribute to the greenhouse effect (IPCC) Contains component(s) included in Annex II of 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)

propan-2-ol Groundwater Groundwater pollutant

<u>glvoxal</u> 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

Reason for revision: 3.2

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

Specific treatment. 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. <u>1. UN number</u>	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	aerosols
14.3. Transport hazard class(es)	
Hazard identification number	
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Rail (RID)

14. <u>1. UN number</u>	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	aerosols
14.3. Transport hazard class(es)	
Hazard identification number	23
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for
	liquids. A package shall not weigh more than 30 kg. (gross mass)

Inland waterways (ADN)

14. <u>1. UN number/ID number</u>	
UN number/ID number	1950
14.2. UN proper shipping name	
Proper shipping name	aerosols
14.3. Transport hazard class(es)	
Class	2
Classification code	5F
14.4. Packing group	
Packing group	

Reason for revision: 3.2

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Date of revision: 2023-03-22

All	RCLEAN
Labels	2.1
4.5. Environmental hazards	
Environmentally hazardous substance mark	no
4.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
(IMDG/IMSBC)	
4.1. UN number	
UN number	1950
4.2. UN proper shipping name	
Proper shipping name	aerosols
4.3. Transport hazard class(es)	
Class	2.1
4.4. Packing group	
Packing group	
Labels	2.1
4. <u>5. Environmental hazards</u>	
Marine pollutant	-
Environmentally hazardous substance mark	no
1.6. Special precautions for user	
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
4.7. Maritime transport in bulk according to IMO instruments	
Annex II of MARPOL 73/78	Not applicable
(ICAO-TI/IATA-DGR)	
4. <u>1. UN number/ID number</u>	
UN number/ID number	1950
4.2. UN proper shipping name	
Proper shipping name	aerosols, flammable
4.3. Transport hazard class(es)	
Class	2.1
4.4. Packing group	
Packing group	
Labels	2.1
4.5. Environmental bazards	

14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	A145
Special provisions	A167
Special provisions	A802
Passenger and cargo transport	
Limited quantities: maximum net quantity per packaging	30 kg G

SECTION 15: Regulatory information

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

VOC content Directive 2010/75/EU

VOC content	Remark
98.7 %	
895.2 g/l	

Directive 2012/18/EU (Seveso III)

Threshold values under normal circumstances				
		Top tier (tonnes)		For this substance or mixture the summation rule has to be applied for:
P3b FLAMMABLE AEROSOLS	5000 (net)	50000 (net)	None	Flammability

Reason for revision: 3.2

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Publication date: 2018-10-13
Date of revision: 2023-03-22
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Prior informed consent (PIC)

Contains component(s) listed in Annex I of Regulation (EU) No 649/2012: Part 1 - List of chemicals subject to export notification procedure

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

≥30% halogenated hydrocarbons, <5% desinfectants, <5% cationic surfactants, perfumes

European drinking water standards (98/83/EC and 2020/2184)

didecyldimethylammonium chloride

Parameter	Parametric value	Note	Reference
Chloride	250 mg/l		Listed in Annex I, Part C, of Directive (EU) 2020/2184 on the
			quality of water intended for human consumption.

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.

or categories set out In Americ 10 Regulation (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 or (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 or (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 or (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 or (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 or (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 or (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 (c) No 227/2012 in Baset, for example in cramemetal lamps and astroy, (c) No 227/2012 propert 2-01 Subtances lastified as fammable gaset (c) No 2012 proper 2-01 Subtances lastified as fammable gaset (c) No 2012 to the section of the interplementation of other community provisions on the caset (b) No 2012 to the section of the interplementation of other community provisions on the caset (b) No 2012 proper 2-01 Subtances lastified as fammable gaset (c) No 2012 to the section of the interplementation of other community provisions on the caset (b) No 2012 to properior (l	and use of certain dangerou		1
propen-2-ol ghypoxal upud substances or mictures fulfilling the criciteria for any of the following based of the following based of the cricita for any of the following based of the following based of the cricitation of any of the following based of the cricitation of any of the following based of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of the cricitation of			Conditions of restriction
ghoal order to any of the following heard classes or clappore set out A manes to Regulate the phase, for cample in order entities by means of differ or clappore set out A manes to Regulate tic() to 127/2008: If () hazard classes 11 to 13, 15 and 27, 31 has 21, 22.34 steppore 13 and 2, 23.35 west of i.			4. Chall so the second in
propan-2-ol Subtances classified as flammable gases category Lor 2, flammable solids category 1 or 2, substances classified as flammable gases 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these ad dispensers are intended for supply to the general public for entertainment and decor y or 3, flammable solids category 1 or 2, flammable gases, category 1, category 1, category 1, regardless of whether they appear in Par3 of Annex VI to they prophoric solids category 1 or artificial snow and forst, a substances classified as any of not.		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;	 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 w ornamental aspects, Articles not complying with paragraph 1 shall not be placed on the market. 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, 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) adopt by the European Committee for Standardisation (CEN). S. Without prejudice to the implementation of other Community provisions relating to th classification, packaging and labelling of dangerous substances and mixtures, suppliers sh 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, legi 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 leg and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead t life threatening lung damage"; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are leg and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead t life threatening lung damage";
propan-2-ol glyoxal 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 Publication date: 2018-10-13	propan-2-ol	category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to	 Shall not be used, as substance or as mixtures in aerosol dispensers where these aeros dispensers are intended for supply to the general public for entertainment and decorativ purposes such as the following: metallic glitter intended mainly for decoration, artificial snow and frost, "whoopee" cushions, silly string aerosols, initation excrement, horns for parties, decorative flakes and foams, artificial cobwebs, Stink bombs. Without prejudice to the application of other Community provisions on the classificati packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legit and indelibly with: "For professional users only". By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the
	propan-2-ol glyoxal didecyldimethylammonium chloride	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	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/20
Date of revision: 2023-03-22	son for revision: 3.2		

AIRCLEAN			
	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.		
<u>National legislation Belgium</u> <u>AIRCLEAN</u> No data available propan-2-ol			
Agents cancérigènes, mutagènes et reprotoxiques (Code du bien-être au travail, Livre VI, titre 2)	alcool isopropylique; VI.2.2.; Liste des procédés au cours desquels une substance ou un mélange se dégage; Procédé à l'acide fort dans la fabrication d'alcool isopropylique.		
National legislation The Netherlands	<u>S</u>		
AIRCLEAN Waterbezwaarlijkheid	B (2); Algemene Beoordelingsmethodiek (ABM)		
<u>National legislation France</u> <u>AIRCLEAN</u> No data available <u>National legislation Germany</u> AIRCLEAN			
Lagerklasse (TRGS510)	2B: Aerosolpackungen und Feuerzeuge		
WGK propan-2-ol	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017		
TA-Luft	5.2.5		
TRGS900 - Risiko der Fruchtschädigung glyoxal	Propan-2-ol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden		
TA-Luft	5.2.5/I		
didecyldimethylammonium chlor			
TA-Luft <u>National legislation Austria</u> <u>AIRCLEAN</u>	5.2.5/1		
No data available <u>National legislation United Kingdom</u> AIRCLEAN	1		
No data available			
<u>Other relevant data</u> <u>AIRCLEAN</u> No data available			
propan-2-ol			
IARC - classification TLV - Carcinogen	3; Isopropanol 2-propanol; A4		
glyoxal TLV - Skin Sensitisation Glyoxal; SEN; Sensitization			
TLV - Carcinogen	Glyoxal; A4		
L5.2. Chemical safety assessment has no chemical safety assessment has been been been been been been been bee	nt as been conducted for the mixture.		
TION 16: Other inform	ation		
Full text of any H- and EUH-statemeH222Extremely flammable aeroH225Highly flammable liquid arH229Pressurised container: MaH280Contains gas under pressuH301Toxic if swallowed.	nts referred to under section 3: osol. nd vapour. y burst if heated.		
on for revision: 3.2	Publication date: 2018-10-13 Date of revision: 2023-03-22		

H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H341 Suspected of causing genetic defects. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects. 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 % FC50 Effect Concentration 50 % ErC50 EC50 in terms of reduction of growth rate GLP **Good Laboratory Practice** LC0 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

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