

Revision nr. 6 Dated 27/09/2022

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

1.1. Product identifier

Mixture identification: Product Name: Code:

ZETA 3 WIPES POP-UP C810064

1.2. Relevant identified uses of the substance or mixture and uses advised against For professional use only. Wipes for disinfection and cleaning of non-invasive medical devices.

1.3. Details of the supplier of the safety data sheet

Name Zhermack S.p.a Via Bovazecchino 100 45021 Badia Polesine (RO) Italy tel. +39 0425-597611 fax +39 0425-597689 Competent person responsible for the safety data sheet:

msds@zhermack.com

1.4. Emergency telephone number UK Emergency number: 999 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP) Aquatic Chronic 3, H412 Harmful to aquatic life with long lasting effects. Adverse physicochemical, human health and environmental effects: No other hazards

2.2. Label elements

Hazard pictograms: None Hazard statements: H412 Harmful to aquatic life with long lasting effects. Precautionary statements: P102 Keep out of reach of children. P273 Avoid release to the environment. P280 Wear protective gloves. P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. P501 Dispose of contents/container to an approved waste disposal plant. Special Provisions: None

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

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Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 2,5% - < 5%	ethanol; ethyl alcohol	Index number: CAS: EC: REACH No.: CAS:	603-002-00-5 64-17-5 200-578-6 01-21194576 10-43-XXXX 68424-85-1	flammable liquid and vapour. Eye Irrit. 2 H319 Causes serious eye irritation.
>= 0,1% - < 1%	Benzyl-C12-14-alkyldi methylammonium chlorides		68424-85-1 01-21199705 50-39-XXXX	Aquatic Acute 1 H400 Very toxic to aquatic life. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. Acute Tox. 4 H302 Harmful if swallowed. Eye Dam. 1 H318 Causes serious eye damage. Skin Corr. 1B H314 Causes severe skin burns and eye damage. LD50: 397,50 mg/kg
>= 0,1% - < 1%	propan-2-ol; isopropyl alcohol; isopropanol	Index number: CAS: EC: REACH No.:	603-117-00-0 67-63-0 200-661-7 01-21194575 58-25-XXXX	STOT SE 3 H336 May cause drowsiness or dizziness. Flam. Liq. 2 H225 Highly flammable liquid and vapour. Eye Irrit. 2 H319 Causes serious eye irritation.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed None

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

None



SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures For non emergency personnel:

Wear personal protection equipment.

Wear personal protection equipment. Remove persons to safety. See protective measures under point 7 and 8. For emergency responders: Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. See also section 8 for recommended protective equipment. Advice on general occupational hygiene: Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed. Incompatible materials: See section 10.5. Instructions as regards storage premises: Adequately ventilated premises. Storage temperature: 5 - 35°C.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters ZETA 3 WIPES POP-UP

ethanol; ethyl alcohol - CAS: 64-17-5

OEL Type	TWA		Duratio n	STEL		Duratio n	Notes	Country
TLV-ACGIH				1884	1000	15min	A3 - URT	
				mg/m3	ppm		irr	
MAK	1900	1000	8h	3800	2000	15min		AUSTRIA
	mg/m3	ppm	0.1	mg/m3	ppm			
VLEP	1907	1000	8h		1-1-1-1			BELGIUM
	mg/m3	ppm						
TLV	1000	PP-0	8h					BULGARIA
	mg/m3							
TLV	1000		8h	3000		15min		CZECH
	mg/m3		-	mg/m3		-		REPUBLIC
AGW	960	500	8h	1920	1000	15min		GERMANY
	mg/m3	ppm		mg/m3	ppm			
MAK	960	500	8h	1920	1000	15min		GERMANY
l	mg/m3	ppm	-	mg/m3	ppm	-		_
TLV	1900	1000	8h	Ŭ				DENMARK
	mg/m3	ppm	-					
VLA				1910	1000	15min		SPAIN
				mg/m3	ppm			
TLV	1000	500	8h	1900	1000	15min		ESTONIA
	mg/m3	ppm		mg/m3	ppm			
VLEP	1900	1000	8h	9500	5000	15min		FRANCE
	mg/m3	ppm	-	mg/m3	ppm	-		
HTP	1900	1000	8h	2500	1300	15min		FINLAND
	mg/m3	ppm	-	mg/m3	ppm	-		
TLV	1900	1000	8h					GREECE
	mg/m3	ppm						
AK	1900	1	8h	7600		15min		HUNGARY
	mg/m3			mg/m3				
GVI/KGVI	1900	1000	8h					CROATIA
	mg/m3	ppm						
OELV					1000	15min		IRELAND
					ppm			
RD	1000	500	8h	1900	1000	15min		LITHUANIA
	mg/m3	ppm		mg/m3	ppm			
RV	1000		8h					LATVIA
	mg/m3							
TLV	950	500	8h					NORWAY
	mg/m3	ppm						
TGG	260		8h	1900		15min	Skin	NETHERLAN
	mg/m3			mg/m3				DS
NDS/NDSCh	1900		8h					POLAND
	mg/m3							
NGV/KGV	1000	500	8h	1900	1000	15min		SWEDEN
	mg/m3	ppm		mg/m3	ppm			
NPEL	960	500	8h	1920		15min		SLOVAKIA
	mg/m3	ppm		mg/m3				(Slovak
				_				Republic)
WEL	1920	1000	8h					UNITED

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	mg/m3	ppm				KINGDOM
ACGIH				1000	A3 - URT	
				ppm	irr	

Benzyl-C12-14-alkyldimethylammonium chlorides - CAS: 68424-85-1

OEL Type	TWA	Duratio	STEL	Duratio	Notes	Country
		n		n		
No data available						

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

OEL Type	TWA		Duratio n	STEL		Duratio n	Notes	Country
AGW	500	200	8h	1000	400	15min		GERMANY
	mg/m3	ppm		mg/m3	ppm			
MAK	500	200	8h	1000	400	15min		GERMANY
	mg/m3	ppm		mg/m3	ppm			
MAK	500	200	8h	1000	400	15min		SWITZERLA
	mg/m3	ppm		mg/m3	ppm			ND
VME/VLE	500	200	8h	1000	400	15min		SWITZERLA
	mg/m3	ppm		mg/m3	ppm			ND
MV	500	200	8h	2000	800	15min		SLOVENIA
	mg/m3	ppm		mg/m3	ppm			
AK	500		8h	2000		15min	Skin	HUNGARY
	mg/m3			mg/m3				
GVI/KGVI	999	400	8h	1250	500	15min		CROATIA
	mg/m3	ppm		mg/m3	ppm			
MAK	500	200	8h	2000	800	15min		AUSTRIA
	mg/m3	ppm		mg/m3	ppm			
NDS/NDSCh	900		8h	1200		15min	Skin	POLAND
	mg/m3			mg/m3				
NGV/KGV	350	150	8h	Ceiling	Ceiling	15min		SWEDEN
	mg/m3	ppm		600	250			
				mg/m3	ppm			
NPEL	500	200	8h	1000	400	15min		SLOVAKIA
	mg/m3	ppm		mg/m3	ppm			(Slovak
								Republic)
OELV		200	8h		400	15min	Skin	IRELAND
		ppm			ppm			
RD	350	150	8h	600	250	15min		LITHUANIA
	mg/m3	ppm		mg/m3	ppm			
RV	350		8h	600		15min		LATVIA
	mg/m3			mg/m3				
TGG	650		8h					NETHERLAN
	mg/m3							DS
TLV	350	150	8h	600	250	15min		ESTONIA
	mg/m3	ppm		mg/m3	ppm			
TLV	245	100	8h					NORWAY
	mg/m3	ppm						
TLV	200	81 ppm	8h	500	203	15min		ROMANIA
	mg/m3			mg/m3	ppm			
TLV	500	203.5	8h	1000	407	15min		CZECH
	mg/m3	ppm		mg/m3	ppm			REPUBLIC

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TLV	490 mg/m3	200 ppm	8h					DENMARK
TLV	980 mg/m3		8h	1225 mg/m3		15min		BULGARIA
TLV	980 mg/m3	400 ppm	8h	1225 mg/m3	500 ppm	15min		GREECE
TLV-ACGIH		200 ppm	8h		400 ppm	15min		
VLEP				980 mg/m3	400 ppm	15min		FRANCE
VLEP	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		BELGIUM
WEL	999 mg/m3	400 ppm	8h	1250 mg/m3	500 ppm	15min		UNITED KINGDOM
VLA	500 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		SPAIN
ACGIH		200 ppm	8h		400 ppm		A4, BEI - Eye and URT irr, CNS impair	

DNEL Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Consumer: 87 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 114 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 206 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 950 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 343 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Benzyl-C12-14-alkyldimethylammonium chlorides - CAS: 68424-85-1

Consumer: 3.4 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 1.64 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 3.96 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 3.4 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 5.7 mg/kg bw/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 89 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 26 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 888 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

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Worker Professional: 500 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects PNEC Exposure Limit Values ethanol; ethyl alcohol - CAS: 64-17-5 Target: intermittent release - Value: 2.75 mg/l Target: Microorganisms in sewage treatments - Value: 580 mg/l Target: Fresh Water - Value: 0.96 mg/l Target: Marine water - Value: 0.79 mg/l Target: Freshwater sediments - Value: 3.6 mg/kg Target: Marine water sediments - Value: 2.9 mg/kg Target: Food chain - Value: 0.72 mg/kg Target: Soil (agricultural) - Value: 0.63 mg/kg Benzyl-C12-14-alkyldimethylammonium chlorides - CAS: 68424-85-1 Target: Fresh Water - Value: 0.001 mg/l Target: Marine water - Value: 0.001 mg/l Target: Freshwater sediments - Value: 12.27 mg/kg Target: Marine water sediments - Value: 13.09 mg/kg Target: intermittent release - Value: 0 mg/l Target: Microorganisms in sewage treatments - Value: 0.4 mg/l Target: Soil (agricultural) - Value: 7 mg/kg propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0 Value: 552 mg/kg Target: Soil (agricultural) - Value: 28 mg/kg Target: Fresh Water - Value: 140.9 mg/l Target: Marine water - Value: 140.9 mg/l Target: Freshwater sediments - Value: 552 mg/kg **Biological Exposure Index** propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0 Value: 40 mg/L - Biological Indicator: Acetone in urine - Sampling Period: End of turn; End of working week 8.2. Exposure controls Precautionary measures: Give adequate ventilation to the premises where the product is stored and/or handled. Eye protection: Wear airtight protective goggles (EN 166). Protection for skin: Wear professional overalls and safety footwear (EN 14605). Protection for hands: Protect hands with work gloves (EN 374). The following should be considered when choosing work glove material (EN 374): compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use. Respiratory protection: Use respiratory protection where ventilation is insufficient or exposure is prolonged. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered (e.g. TLV-TWA). Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls: None

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	White		
Odour:	Characteristic		
Appearance:	white washcloth		
Melting point/freezing point:	Not Relevant		
Boiling point or initial boiling point and boiling range:	Not available		
Flammability:	Not available		
Lower and upper explosion limit:	Not available		
Flash point:	Not available		
Auto-ignition temperature:	Not available		
Decomposition temperature:	Not available		
pH:	5-8		
Kinematic viscosity:	Not available		
Solubility in water:			
Solubility in oil:	Not available		
Partition coefficient n-octanol/water (log value):	Not available		
Vapour pressure:	Not available		
Density and/or relative density:	Not available		
Relative vapour density:	Not available		
	Particle characteristics:		
Particle size:	Not available		

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

- 10.1. Reactivity
 - Stable under normal conditions
- 10.2. Chemical stability
 - Stable under normal conditions
- 10.3. Possibility of hazardous reactions None
- 10.4. Conditions to avoid
- Stable under normal conditions.
- 10.5. Incompatible materials
 - None in particular.
- **10.6. Hazardous decomposition products** None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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Toxicological information of the product: ZETA 3 WIPES POP-UP

a) acute toxicity Not classified

- b) skin corrosion/irritation Not classified
- c) serious eye damage/irritation Not classified
- d) respiratory or skin sensitisation Not classified
- e) germ cell mutagenicity Not classified

f) carcinogenicity Not classified

g) reproductive toxicity Not classified

- h) STOT-single exposure Not classified
- i) STOT-repeated exposure Not classified

j) aspiration hazard Not classified

Toxicological information of the main substances found in the product: ethanol; ethyl alcohol - CAS: 64-17-5 a) acute toxicity: Test: LC50 - Route: Inhalation - Species: Rat 117 mg/l - Duration: 4h - Source: (similar to OECD 403. ECHA dossier). Test: LD50 - Route: Oral - Species: Rat 10470 mg/kg - Source: (OECD 401, ECHA dossier). b) skin corrosion/irritation: Species: Rabbit - Based on available data, the classification criteria are not met -Source: (OECD 404, ECHA dossier). c) serious eye damage/irritation: Species: Rabbit - Eye Irritant - Source: (OECD 405, ECHA dossier). d) respiratory or skin sensitisation: Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (similar to OECD 406, ECHA dossier). e) germ cell mutagenicity: Test: In vitro - Negative - Source: (ECHA dossier). Test: In vivo - Negative - Source: (ECHA dossier). Benzyl-C12-14-alkyldimethylammonium chlorides - CAS: 68424-85-1 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat 397.5 mg/kg - Source: (ECHA dossier). Test: LD50 - Route: Skin - Species: Rabbit 3412 mg/kg - Source: (ECHA dossier).

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11.2. Information on other hazards

Endocrine disrupting properties: No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity Adopt good working practices, so that the product is not released into the environment. ZETA 3 WIPES POP-UP The product is classified: Aquatic Chronic 3 - H412 ethanol; ethyl alcohol - CAS: 64-17-5 a) Aquatic acute toxicity: Endpoint: EC50 - Species: Daphnia 857 mg/l - Duration h: 48h (Daphnia magna, ECHA dossier). Endpoint: LC50 - Species: Fish 11200 mg/l - Duration h: 96h (ECHA dossier). Endpoint: EC50 - Species: Algae 4432 mg/l - Duration h: 7d (ECHA dossier). b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Algae 280 mg/l - Duration h: 7d (ECHA dossier). propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0 a) Aquatic acute toxicity: Endpoint: EC50 - Species: Daphnia > 10000 mg/l - Duration h: 48h (similar to OECD 202, Daphnia magna, ECHA dossier). Endpoint: LC50 - Species: Fish 9640 mg/l - Duration h: 96h (similar to OECD 203, Pimephales promelas, ECHA dossier). 12.2. Persistence and degradability ethanol; ethyl alcohol - CAS: 64-17-5 Biodegradability: Readily biodegradable Benzyl-C12-14-alkyldimethylammonium chlorides - CAS: 68424-85-1 Biodegradability: Readily biodegradable propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0 Biodegradability: Readily biodegradable 12.3. Bioaccumulative potential propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0 Test: Kow - Partition coefficient 0.05 12.4. Mobility in soil Not available 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None 12.6. Endocrine disrupting properties No endocrine disruptor substances present in concentration >= 0.1% 12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

- 14.2. UN proper shipping name
 - Not available
- 14.3. Transport hazard class(es) Not available

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14.4. Packing group	
Not available	
14.5. Environmental hazards	
ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No
14.6. Special precautions for user	
Not available	
14.7. Maritime transport in bulk acc	cording to IMO instruments

Not Applicable

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 2020/878 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: No restriction. Restrictions related to the substances contained: No restriction. Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None Composition according to Annex VII.a of Reg. (EC) 648/2004: <5%: non-ionic surfactant disinfectant,perfume.

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe) WGK1 - Slightly hazardous for water

Lagerklasse according to TRGS 510: LGK 10: Combustible liquids

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Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None.

California Proposition 65

Substance(s) listed under California Proposition 65: None.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out:

SECTION 16	: Other in	formation
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Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

This safety data sheet has been completely updated in compliance to Regulation 2020/878. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECHA – European Chemical Agency

GESTIS - Information system on hazardous substances of the German Social Accident Insurance

IARC – International Agency for Research on Cancer

IPCS INCHEM – International Programme on Chemical Safety

ISS – Istituto Superiore di Sanità

PubChem - open chemistry database at the National Institutes of Health (NIH)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

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ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.