

#### Revision nr. 6 Dated 21/02/2023

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

#### 1.1. Product identifier

Mixture identification:

Product Name: ZETA 7 SPRAY Code: C810050

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

For professional use only. Disinfectant for dental impressions.

#### 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)

Flam. Liq. 2, H225 Highly flammable liquid and vapour.

Eye Irrit. 2, H319 Causes serious eye irritation.

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:



Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P264 Wash hands thoroughly after handling.

P280 Wear eye/face protection.

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

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P337+P313 If eye irritation persists: Get medical advice/attention.

**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% 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
>= 80% - < 90%	ethanol; ethyl alcohol	Index number: CAS: EC: REACH No.:	603-002-00-5 64-17-5 200-578-6 01-21194576 10-43-XXXX	Flam. Liq. 2 H225 Highly flammable liquid and vapour. Eye Irrit. 2 H319 Causes serious eye irritation.
>= 8% - < 10%	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.
>= 3% - < 5%	Polyalkyleneoxide modified heptamethyltrisiloxane	CAS:	27306-78-1	Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects. M=1.  Acute Tox. 4 H332 Harmful if inhaled.  Eye Irrit. 2 H319 Causes serious eye irritation.  Acute Toxicity Estimate:  ATE - Inhalation (Dust/mist) 2 mg/l
<0,1%	Diphenyl ether	CAS: EC: REACH No.:	101-84-8 202-981-2 01-21194725 45-33-XXXX	Aquatic Acute 1 H400 Very toxic to aquatic life. M=1. Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects. 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:



Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

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.

Remove all sources of ignition.

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

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

See section 10.5.

Instructions as regards storage premises:

Cool and adequately ventilated.

#### 7.3. Specific end use(s)

See section 1.2.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

ZETA 7 SPRAY

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

OEL Type	TWA		Duratio n	STEL		Duratio n	Notes	Country
TLV-ACGIH				1884 mg/m3	1000 ppm	15min	A3 - URT irr	
MAK	1900 mg/m3	1000 ppm	8h	3800 mg/m3	2000 ppm	15min		AUSTRIA
VLEP	1907 mg/m3	1000 ppm	8h					BELGIUM
TLV	1000 mg/m3		8h					BULGARIA
TLV	1000 mg/m3		8h	3000 mg/m3		15min		CZECH REPUBLIC
AGW	960 mg/m3	500 ppm	8h	1920 mg/m3	1000 ppm	15min		GERMANY
MAK	960 mg/m3	500 ppm	8h	1920 mg/m3	1000 ppm	15min		GERMANY
TLV	1900 mg/m3	1000 ppm	8h					DENMARK
VLA				1910 mg/m3	1000 ppm	15min		SPAIN
TLV	1000 mg/m3	500 ppm	8h	1900 mg/m3	1000 ppm	15min		ESTONIA
VLEP	1900 mg/m3	1000 ppm	8h	9500 mg/m3	5000 ppm	15min		FRANCE
HTP	1900	1000	8h	2500	1300	15min		FINLAND



	mg/m3	ppm		mg/m3	ppm			
TLV	1900	1000	8h	ilig/ilio	ррпп			GREECE
'   '	mg/m3	ppm	011					OKELOL
AK	1900	ррпп	8h	7600		15min		HUNGARY
7 (1)	mg/m3		011	mg/m3		10111111		1101407411
GVI/KGVI	1900	1000	8h	mg/me				CROATIA
	mg/m3	ppm	0					
OELV	1119.1115	1 1 1 1 1 1			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
	mg/m3	ppm						KINGDOM
ACGIH					1000		A3 - URT	
					ppm		irr	

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

OEL Type	TWA		Duratio	STEL		Duratio	Notes	Country
			n			n		
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 mg/m3	200 ppm	8h	1000 mg/m3	400 ppm	15min		SLOVAKIA (Slovak Republic)
OELV		200 ppm	8h		400 ppm	15min	Skin	IRELAND
RD	350 mg/m3	150 ppm	8h	600 mg/m3	250 ppm	15min		LITHUANIA
RV	350 mg/m3		8h	600 mg/m3		15min		LATVIA
TGG	650 mg/m3		8h					NETHERLAN DS
TLV	350 mg/m3	150 ppm	8h	600 mg/m3	250 ppm	15min		ESTONIA
TLV	245 mg/m3	100 ppm	8h					NORWAY
TLV	200 mg/m3	81 ppm	8h	500 mg/m3	203 ppm	15min		ROMANIA
TLV	500 mg/m3	203.5 ppm	8h	1000 mg/m3	407 ppm	15min		CZECH REPUBLIC
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	

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1

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

Diphenyl ether - CAS: 101-84-8

OEL Type	TWA		Duratio	STEL		Duratio	Notes	Country
			n			n		
AGW	7.1	1 ppm	8h	7.1	1 ppm	15min	Inhalable	GERMANY
	mg/m3			mg/m3				
MAK	7.1	1 ppm	8h	7.1	1 ppm	15min	Inhalable	GERMANY



	mg/m3			mg/m3				
OELV	7 mg/m3	1 ppm	8h					IRELAND
NDS/NDSCh	7 mg/m3		8h	14 mg/m3		15min		POLAND
TLV	5 mg/m3	0.7 ppm	8h	10 mg/m3	1.4 ppm	15min		ROMANIA
VLA	7.1 mg/m3	1 ppm	8h	14.2 mg/m3	2 ppm	15min		SPAIN
MAK	7 mg/m3	1 ppm	8h	7 mg/m3	1 ppm	15min		SWITZERLA ND
WEL	7.1 mg/m3	1 ppm	8h					UNITED KINGDOM
VLEP	7 mg/m3	1 ppm	8h	14 mg/m3	2 ppm	15min		BELGIUM
MAK	7 mg/m3	1 ppm	8h					AUSTRIA
TLV	7 mg/m3	1 ppm	8h	14 mg/m3	2 ppm	15min		DENMARK
EU	7 mg/m3	1 ppm	8h	14 mg/m3	2 ppm			
HTP	7 mg/m3	1 ppm	8h	21 mg/m3	3 ppm	15min		FINLAND
VLEP	7 mg/m3	1 ppm	8h					FRANCE
ACGIH		1 ppm	8h		2 ppm		(V) - URT and eye irr, nausea	

**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

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

Worker Professional: 500 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Diphenyl ether - CAS: 101-84-8

Worker Professional: 7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects



Worker Professional: 59 mg/m3 - Exposure: Human Inhalation - Frequency: Long

Term, systemic effects

Worker Professional: 25 mg/kg bw/d - Exposure: Human Dermal - 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

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

Diphenyl ether - CAS: 101-84-8

Target: Fresh Water - Value: 0 mg/l Target: Marine water - Value: 0 mg/l

Target: Freshwater sediments - Value: 0.093 mg/kg Target: Marine water sediments - Value: 0.009 mg/kg Target: intermittent release - Value: 0.005 mg/l

Target: Microorganisms in sewage treatments - Value: 10 mg/l

Target: Soil (agricultural) - Value: 0.018 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.

Eve protection:

Wear airtight protective goggles (EN 166).

Protection for skin:

Wear professional overalls and safety footwear (EN 14605).

Protection for hands:

Suitable material:

FKM (fluoro rubber - 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:

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None

#### SECTION 9: Physical and chemical properties

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

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	Transparent		
Odour:	Lemon		
Melting point/freezing point:	-100°C		
Boiling point or initial boiling point and boiling range:	79°C	Regulation (EC) No. 440/2008, Annex, A.2	
Flammability:	Flam. Liq. 2, H225		
Lower and upper explosion limit:	Not available		
Flash point:	14 ° C	EN ISO 3679	
Auto-ignition temperature:	Not Relevant		
Decomposition temperature:	Not Relevant		
pH:	Not available		@23°C, 10% w/w sol.
Kinematic viscosity:	Not available		
Solubility in water:	Soluble		
Solubility in oil:	Not available		
Partition coefficient n-octanol/water (log value):	Not available		
Vapour pressure:	Not available		
Density and/or relative density:	0.790 - 0.826 @23°C		
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

The vapours may also form explosive mixtures with the air.

#### 10.4. Conditions to avoid

Avoid bunching of electrostatic charges.

Avoid all sources of ignition.

#### 10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

#### 10.6. Hazardous decomposition products



None

#### SECTION 11: Toxicological information

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

Toxicological information of the product:

ZETA 7 SPRAY

a) acute toxicity

Not classified

b) skin corrosion/irritation

Not classified

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

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).

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

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a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: (MSDS supplier).

Test: LC50 - Route: Inhalation - Species: Rat > 20 mg/l - Duration: 4h - Source: (MSDS supplier).

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: (MSDS supplier).

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1

a) acute toxicity

ATE - Inhalation (Dust/mist) 2 mg/l

Test: LC50 - Route: Inhalation - Species: Rat 2 mg/l - Duration: 4h - Source: (MSDS supplier)

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/l - Source: (MSDS supplier)

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/l - Source: (MSDS supplier).

b) skin corrosion/irritation:

Species: Rat - Based on available data, the classification criteria are not met - Source: (MSDS supplier).

c) serious eye damage/irritation:

Species: Rabbit - Eye Irritant - Source: (MSDS supplier).

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (MSDS supplier).

e) germ cell mutagenicity:

Test: In vitro - Negative - Source: (Test di ames, MSDS supplier).

Test: In vivo - Species: Mouse - Negative - Source: (MSDS supplier).

f) carcinogenicity:

No data available for the product

g) reproductive toxicity:

No data available for the product

h) STOT-single exposure:

No data available for the product

i) STOT-repeated exposure:

No data available for the product

j) aspiration hazard:

No data available for the product

Diphenyl ether - CAS: 101-84-8

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: (ECHA dossier).

b) skin corrosion/irritation:

Species: Rabbit - Based on available data, the classification criteria are not met - Source: (FIFRA-TSCA, GLP, ECHA dossier).

c) serious eye damage/irritation:

Species: Rabbit - Eye Irritant - Source: (ECHA dossier).

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Based on available data, the classification criteria are not met - Source: (epicutaneous test, ECHA dossier).

e) germ cell mutagenicity:

Test: In vitro - Negative - Source: (ECHA dossier).

i) STOT-repeated exposure:

Route: Skin - Species: Rat - Negative - Source: (ECHA dossier).

#### 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.

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#### ZETA 7 SPRAY

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).

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 6.8 mg/l - Duration h: 96h (Brachydanio rerio, MSDS supplier)

Endpoint: IC50 - Species: Algae 32 mg/l - Duration h: 72h (Pseudokirchneriella subcapitata, MSDS supplier)

Endpoint: EC50 - Species: Daphnia 25 mg/l - Duration h: 48h (Daphnia similis, MSDS supplier).

Endpoint: NOEC - Species: Fish 3.2 mg/l (Oncorhynchus mykiss, 96h, MSDS supplier). Endpoint: NOEC - Species: Daphnia 5.6 mg/l (Daphnia magna, 48h, MSDS supplier).

Diphenyl ether - CAS: 101-84-8

a) Aquatic acute toxicity:

Endpoint: EC10 - Species: Fish 4.2 mg/l - Duration h: 96h (study report, Oncorhynchus mykiss, ECHA dossier).

Endpoint: EC50 - Species: Daphnia 1.7 mg/l - Duration h: 48h (OECD 202, Daphnia magna, ECHA dossier).

#### 12.2. Persistence and degradability

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

Biodegradability: Readily biodegradable

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

Biodegradability: Readily biodegradable

Polyalkyleneoxide modified heptamethyltrisiloxane - CAS: 27306-78-1

Biodegradability: Non-readily biodegradable

Diphenyl ether - CAS: 101-84-8

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

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Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

#### SECTION 14: Transport information



#### 14.1. UN number or ID number

ADR-UN Number: 1987 IATA-UN Number: 1987 IMDG-UN Number: 1987

#### 14.2. UN proper shipping name

ADR-Shipping Name: ALCOHOLS, N.O.S. (ethyl alcohol; isopropyl alcohol)
IATA-Shipping Name: ALCOHOLS, N.O.S. (ethyl alcohol; isopropyl alcohol)
IMDG-Shipping Name: ALCOHOLS, N.O.S. (ethyl alcohol; isopropyl alcohol)

#### 14.3. Transport hazard class(es)

ADR-Class: 3
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3

#### 14.4. Packing group

ADR-Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II

#### 14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

IMDG-EmS: F-E , S-D

#### 14.6. Special precautions for user

ADR-Subsidiary hazards:

ADR-S.P.: 274 601 640C

ADR-Transport category (Tunnel restriction code): 2 (D/E)

ADR - Hazard identification number: 33
IATA-Passenger Aircraft: 353
IATA-Subsidiary hazards: IATA-Cargo Aircraft: 364
IATA-S.P.: A3 A180
IATA-ERG: 3L
IMDG-Subsidiary hazards: -

IMDG-Subsidiary flazards.

IMDG-Stowage and handling: Category B

IMDG-Segregation: -

#### 14.7. Maritime transport in bulk according 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)

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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. 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:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

WGK1 - Slightly hazardous for water

Lagerklasse according to TRGS 510:

LGK 3: Flammable liquids

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

California Proposition 65

Substance(s) listed under California Proposition 65:

None.

Composition according to Annex VII.a of Reg. (EC) 648/2004:

> 30%: disinfectants;

< 5%: non-ionic surfactant, parfume (Limonene, Citral).

#### 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: propan-2-ol; isopropyl alcohol; isopropanol

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#### SECTION 16: Other information

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
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 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
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
Flam. Liq. 2, H225	On basis of test data
Eye Irrit. 2, H319	Calculation method
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.

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.

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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.

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