

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Revision date: 23.09.2020

smartseal® cervi

Product code: 10173

Page 1 of 13

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

1.1. Product identifier

smartseal® cervi

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

Use of the substance/mixture

Ligth curing protective lacquer for use in dentistry.

1.3. Details of the supplier of the safety data sheet

Company name:	DETAX GmbH & Co. KG	
Street:	Carl-Zeiss-Strasse	
Place:	D-76275 Ettlingen	
Telephone:	+49 7243/510-0	Telefax: +49 7243/510-100
e-mail:	post@detax.de	
Internet:	www.detax.de	
Responsible Department:	Emergency number:	

+49 7243/510-0

This number is only obtainable during office hours (Monday - Thursday 8.00 a.m. - 5.00 p.m., Friday 8.00 a.m. - 4.00 p.m.)

1.4. Emergency telephone number:

+49 7243/510-0

This number is only obtainable during office hours (Monday - Thursday 8.00 a.m. - 5.00 p.m., Friday 8.00 - 4.00 p.m.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

"acetone; propan-2-one; propanone"

acrylic acid derivates

4-(methacryloyloxyethyl)-trimellitic acid hydride

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

2-hydroxyethyl methacrylate

Signal word: Danger

Safety Data Sheet

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 2 of 13

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic 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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P370+P378	In case of fire: Use Carbon dioxide (CO ₂), Foam, Extinguishing powder to extinguish.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.

Additional advice on labelling

According to Regulation (EC) 1272/2008, art.1 No. 5 (d) this product as a medical product must not be labelled!

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Chemical characterization

Mixture of acrylic/ methacrylic resins with auxilliary matters.

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 3 of 13

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
67-64-1	"acetone; propan-2-one; propanone"			20 - 50 %
	200-662-2	606-001-00-8		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
	acrylic acid derivates			20 - < 25 %
	Eye Irrit. 2, Skin Sens. 1A, Aquatic Chronic 3; H319 H317 H412			
3290-92-4	trimethylolpropane trimethacrylate			5 - 20 %
	221-950-4			
	Aquatic Chronic 2; H411			
32435-46-4	bis(methacryloxyethyl) hydrogen phosphate			1 - 20 %
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335			
70293-55-9	4-(methacryloyloxyethyl)-trimellitic acid hydride			5 - < 10 %
	274-547-0			
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H302 H315 H319 H317			
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide			0,1 - 5 %
	423-340-5	015-189-00-5	01-2119489401-38	
	Skin Sens. 1, Aquatic Chronic 4; H317 H413			
3380-34-5	2,4,4'-trichloro-2'-hydroxy-diphenyl-ether, 5-chloro-2-(2,4-dichlorophenoxy)phenol, triclosan			< 1 %
	222-182-2	604-070-00-9		
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H315 H319 H400 H410			
868-77-9	2-hydroxyethyl methacrylate			< 1 %
	212-782-2	607-124-00-X	01-2119490169-29	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			

Full text of H and EUH statements: see section 16.

Specific concentration limits and M-factors

CAS No	EC No	Chemical name	Quantity
	Specific concentration limits and M-factors		
3380-34-5	222-182-2	2,4,4'-trichloro-2'-hydroxy-diphenyl-ether, 5-chloro-2-(2,4-dichlorophenoxy)phenol, triclosan	< 1 %
	M akut; H400: M=100 M chron.; H410: M=100		

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

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

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 4 of 13

After ingestion

Rinse mouth immediately and drink plenty of water.

Seek immediately medical advice. Do not induce vomiting. In case of spontaneous vomiting take care of an unhindered flow out of the vomit (danger of suffocation).

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk in case of fire.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide

Safety Data Sheet

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 5 of 13

adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent, . Pyrophoric or self-heating substances.

Further information on storage conditions

Keep only in the original container in a cool, dry and well-ventilated place, away from foodstuffs. Keep away from all kind of lighth. An inert gas blanket should not be applied, because the stability of the product depends on the presence of oxygen (air).

7.3. Specific end use(s)

Sealing varnish to protect exposed root dentine; For use by trained specialist staff.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary . When using do not eat, drink, smoke, sniff.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable are gloves of the following material: Butyl caoutchouc (butyl rubber)

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing .

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid:
 Colour: light yellow
 Odour: faintly faintly like esters

Test method

pH-Value: not determined

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 6 of 13

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	55 °C DIN 51356
Flash point:	-15 °C DIN 51755

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	2 vol. %
Upper explosion limits:	12 vol. %
Ignition temperature:	>400 °C DIN 51794

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

Vapour pressure: (at 20 °C)	140 hPa
Vapour pressure: (at 50 °C)	500 hPa
Density (at 20 °C):	0,98 g/cm ³ DIN 51757
Water solubility:	insoluble

Solubility in other solvents

not determined

Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined
----------------	----------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Reacts with : oxidising agents, radicals forming substances or heavy metal ions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Higher temperatures advance the formulation of explosive vapour-air mixtures, therefore don't expose the product to increased temperatures. Ultra-violet light and daylight initiate polymerisation of the product. Therefore keep only in tightly closed containers away from any sources of light. Keep in a refrigerator at 2°C - 25°C / 36°F - 77 °F.

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 7 of 13

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire, acrid acrylic fumes may occur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-64-1	"acetone; propan-2-one; propanone"				
	oral	LD50 mg/kg	5800	Rat	RTECS
	dermal	LD50 mg/kg	20000	Rabbit	IUCLID
	inhalation (4 h) vapour	LC50	76 mg/l	Rat	
	acrylic acid derivatives				
	oral	LD50 mg/kg	2000	Rat	OECD 423
	dermal	LD50 mg/kg	2000	Rabbit	OECD 402
3290-92-4	trimethylolpropane trimethacrylate				
	oral	LD50 mg/kg	>2000	Rat	
	dermal	LD50 mg/kg	>2000	Rat	OECD 402
70293-55-9	4-(methacryloyloxyethyl)-trimellitic acid hydride				
	oral	LD50 mg/kg	987	Rat	
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide				
	oral	LD50 mg/kg	>2000	Rat	OECD 401
	dermal	LD50 mg/kg	>2000	Rat	OECD 402
3380-34-5	2,4,4'-trichloro-2'-hydroxy-diphenyl-ether, 5-chloro-2-(2,4-dichlorophenoxy)phenol, triclosan				
	oral	LD50 mg/kg	>5000	Rat	OECD 401
	dermal	LD50 mg/kg	>6000	Rat	OECD 402
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 mg/kg	5050	Rat	
	dermal	LD50 mg/kg	>3000	Rabbit	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 8 of 13

Sensitising effects

May cause an allergic skin reaction. (acrylic acid derivatives; 4-(methacryloyloxyethyl)-trimellitic acid hydride; phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide; 2-hydroxyethyl methacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness. ("acetone; propan-2-one; propanone")

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

SECTION 12: Ecological information**12.1. Toxicity**

Very toxic to aquatic life with long lasting effects.

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 9 of 13

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-64-1	"acetone; propan-2-one; propanone"					
	Acute fish toxicity	LC50 mg/l	5540	96 h	Onchorhynchus mykiss	
	Acute algae toxicity	ErC50 mg/l	>100	96 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 mg/l	6100	48 h	Daphnia magna	
	acrylic acid derivatives					
	Algae toxicity	NOEC	10 mg/l	72 d	Pseudokirchneriella subcapitata	OECD 201
3290-92-4	trimethylolpropane trimethacrylate					
	Acute fish toxicity	LC50	2 mg/l	96 h	Onchorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50 mg/l	0,177	72 h	Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50 mg/l	>9,22	48 h	Daphnia magna (Big water flea)	OECD 202
	Acute bacteria toxicity	(>1000 mg/l)		3 h		OECD 209
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide					
	Acute fish toxicity	LC50 mg/l	>0,09	96 h	Brachydanio rerio (zebra-fish)	OECD 203
	Acute algae toxicity	ErC50 mg/l	>0,26	72 h	Desmodesmus subspicatus.	OECD 201
	Acute crustacea toxicity	EC50 mg/l	>1,175	48 h	Daphnia magna (Big water flea)	OECD 202
	Crustacea toxicity	NOEC mg/l	>0,008	21 d	Daphnia magna (Big water flea)	OECD 211
	Acute bacteria toxicity	(>100 mg/l)		3 h	OECD 209	
3380-34-5	2,4,4'-trichloro-2'-hydroxy-diphenyl-ether, 5-chloro-2-(2,4-dichlorophenoxy)phenol, triclosan					
	Acute fish toxicity	LC50 mg/l	0,54	96 h	Brachydanio rerio (zebra-fish)	OECD 203
	Acute algae toxicity	ErC50 mg/l	0,00161	72 h	Desmodesmus subspicatus.	
	Acute crustacea toxicity	EC50 mg/l	0,427	48 h	Daphnia magna (Big water flea)	OECD 202
	Fish toxicity	NOEC mg/l	0,0341	96 d	Onchorhynchus mykiss (Rainbow trout)	OPP 72-4
	Crustacea toxicity	NOEC mg/l	0,04	21 d	Daphnia magna (Big water flea)	OECD 211
	Acute bacteria toxicity	(11 mg/l)		3 h	Activated sludge	OECD 209
868-77-9	2-hydroxyethyl methacrylate					
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas	

12.2. Persistence and degradability

The product has not been tested.

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 10 of 13

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
3290-92-4	trimethylolpropane trimethacrylate			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	53%	28	
	Not readily biodegradable (according to OECD criteria)			
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide			
	CO ₂ formation (% of the theoretical value).	1%	29	
	Not readily biodegradable (according to OECD criteria)			
3380-34-5	2,4,4'-trichloro-2'-hydroxy-diphenyl-ether, 5-chloro-2-(2,4-dichlorophenoxy)phenol, triclosan			
	BOD (% of ThOD).	37%	28	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C
	Not readily biodegradable (according to OECD criteria)			
	specific analysis.	99,4%	14	OECD 302B/ ISO 9888/ EEC 92/69/V, C.9
868-77-9	2-hydroxyethyl methacrylate			
	84	%	28	
	Leicht biologisch abbaubar			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-64-1	"acetone; propan-2-one; propanone"	-0,24
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	5,8
868-77-9	2-hydroxyethyl methacrylate	0,47

BCF

CAS No	Chemical name	BCF	Species	Source
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	<5	Cyprinus carpio (Common Carp)	OECD 305
3380-34-5	2,4,4'-trichloro-2'-hydroxy-diphenyl-ether, 5-chloro-2-(2,4-dichlorophenoxy)phenol, triclosan	4.157	Brachydanio rerio (zebra-fish)	OECD 305

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

Not identified as PBT/ vPvB substances

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 11 of 13

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1866
14.2. UN proper shipping name:	RESIN SOLUTION
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L/ 30 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Other applicable information (land transport)

Flammable liquid

Marine transport (IMDG)

14.1. UN number:	UN 1866
14.2. UN proper shipping name:	Resin solution
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3
Marine pollutant:	P
Limited quantity:	5 L/ 30 kg
EmS:	F-E, S-E

Other applicable information (marine transport)

Flash point -15°C c.c.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1866
14.2. UN proper shipping name:	Resin solution
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3
Limited quantity Passenger:	1 L/ 30 kg
Passenger LQ:	Y341
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

Safety Data Sheet

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 12 of 13

SECTION 15: Regulatory information

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

EU regulatory information

Information according to 2012/18/EU (SEVESO III):	E1 Hazardous to the Aquatic Environment
Additional information:	P5c

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	3 - strongly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

@1602.B016012

Safety Data Sheet

according to Regulation (EC) No 1907/2006

smartseal® cervi

Revision date: 23.09.2020

Product code: 10173

Page 13 of 13

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Gewerblich	-	-	-	-	-	-	-	2

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)