

(GB)

Page 1 of 6
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 19.10.2022 / 0011
 Replacing version dated / version: 12.05.2022 / 0010
 Valid from: 19.10.2022
 PDF print date: 19.10.2022
 COSMO® SP-711.110

(COSMOFEN RM Pulver)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

COSMO® SP-711.110

(COSMOFEN RM Pulver)

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

Relevant identified uses of the substance or mixture:

Resin

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

Weiss Chemie + Technik GmbH & Co. KG
 Hansastrasse 2
 35708 Haiger
 Tel: +49 (0) 2773 / 815-0
 msds@weiss-chemie.de
 www.weiss-chemie.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (WIC)
 +1 872 5888271 (WIC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Skin Sens.	1	H317-May cause an allergic skin reaction.
Aquatic	2	H411-Toxic to aquatic life with long lasting effects.
Chronic		

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Warning

H317-May cause an allergic skin reaction. H411-Toxic to aquatic life with long lasting effects.

P261-Avoid breathing dust. P273-Avoid release to the environment. P280-Wear protective gloves.
 P302+P352-IF ON SKIN: Wash with plenty of water and soap. P333+P313-If skin irritation or rash occurs: Get medical advice / attention.

EUH212-Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Methyl methacrylate
 Dibenzoyl peroxide

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
 The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
 The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a.

3.2 Mixtures

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm)	
Registration number (REACH)	01-2119489379-17-XXXX

Index	022-006-002
EINECS, ELINCS, NLP, REACH-IT List-No.	236-675-5
CAS	13463-67-7
content %	10-20
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Carc. 2, H351 (as inhalation)
Dibenzoyl peroxide	
Registration number (REACH)	01-2119511472-50-XXXX
Index	617-008-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	202-327-6
CAS	94-36-0
content %	1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Org. Perox. Type B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Methyl methacrylate	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119452498-28-XXXX
Index	607-035-00-6
EINECS, ELINCS, NLP, REACH-IT List-No.	201-297-1
CAS	80-62-6
content %	0,1-2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
 The substances named in this section are given with their actual, appropriate classification!
 For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!
 Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Unsuitable cleaning product:

Solvent

Thinners

Eye contact

Remove contact lenses.
 Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.
 Give copious water to drink - consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Adapt to the nature and extent of fire.
 Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic gases

5.3 Advice for firefighters

For personal protective equipment see Section 8.
 In case of fire and/or explosion do not breathe fumes.
 Protective respirator with independent air supply.
 According to size of fire
 Full protection, if necessary.
 Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
 Ensure sufficient ventilation, remove sources of ignition.
 Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid build up of dust.

Ensure sufficient supply of air.

Remove possible causes of ignition - do not smoke.

Avoid contact with eyes or skin.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

If leakage occurs, dam up.
 Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 19.10.2022 / 0011
 Replacing version dated / version: 12.05.2022 / 0010
 Valid from: 19.10.2022
 PDF print date: 19.10.2022
 COSMO® SP-711.110

(COSMOFEN RM Pulver)

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.
 Avoid build up of dust.
 Avoid contact with eyes.
 Avoid long lasting or intensive contact with skin.
 Keep away from sources of ignition - Do not smoke.
 Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
 Observe directions on label and instructions for use.
 Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.
 Store product closed and only in original packing.
 Not to be stored in gangways or stair wells.
 Store at room temperature.
 Store in a dry place.

7.3 Specific end use(s)

Resin

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm)	
WEL-TWA: 10 mg/m3 (total inhalable dust), 4 mg/m3 (respirable dust)	WEL-STEL: ---	---
Monitoring procedures:	---	---
BMGV: ---	Other information: ---	---

Chemical Name	Dibenzoyl peroxide	
WEL-TWA: 5 mg/m3	WEL-STEL: ---	---
Monitoring procedures:	---	---
BMGV: ---	Other information: ---	---

Chemical Name	Methyl methacrylate	
WEL-TWA: 50 ppm (208 mg/m3) (WEL), 50 ppm (EU)	WEL-STEL: 100 ppm (416 mg/m3) (WEL), 100 ppm (EU)	---
Monitoring procedures:	Compur - KITA-184 S (548 618) NIOSH 2537 (Methyl and ethyl metacrylate) - 2003 - EU project BC/CEN/ENTR/000/2002-16 card 109-2 (2004) OSHA 94 (Methyl Methacrylate) - 1992	---
BMGV: ---	Other information: ---	---

Chemical Name	Silicon dioxide	
WEL-TWA: 6 mg/m3 (total inh. dust), 2.4 mg/m3 (resp. dust)	WEL-STEL: ---	---
Monitoring procedures:	---	---
BMGV: ---	Other information: ---	---

Chemical Name	general dust limit	
WEL-TWA: 10 mg/m3 (inhal. dust), 4 mg/m3 (respir. dust)	WEL-STEL: ---	---
Monitoring procedures:	---	---
BMGV: ---	Other information: ---	---

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,184	mg/l	
	Environment - marine		PNEC	0,0184	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,193	mg/l	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - sediment, freshwater		PNEC	100	mg/kg dw	
	Environment - sediment, marine		PNEC	100	mg/kg dw	
	Environment - soil		PNEC	100	mg/kg dw	
	Environment - oral (animal feed)		PNEC	1667	mg/kg feed	
Consumer	Human - oral	Long term, systemic effects	DNEL	700	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	10	mg/m3	

Dibenzoyl peroxide						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,0002	mg/l	
	Environment - marine		PNEC	0,00002	mg/l	

	Environment - sediment, freshwater		PNEC	0,013	mg/kg dw	
	Environment - sediment, marine		PNEC	0,001	mg/kg dw	
	Environment - sewage treatment plant		PNEC	0,35	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,00062	mg/l	
	Environment - soil		PNEC	0,0025	mg/kg dw	
Consumer	Human - oral	Long term, systemic effects	DNEL	2	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	13,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	39	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,034	mg/cm ²	

Methyl methacrylate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,94	mg/l	
	Environment - soil		PNEC	1,47	mg/kg	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - marine		PNEC	0,094	mg/l	
	Environment - sediment		PNEC	5,74	mg/kg	
	Environment - sediment, freshwater		PNEC	10,2	mg/kg	
	Environment - sediment, marine		PNEC	0,102	mg/kg	
Consumer	Human - inhalation	Short term, local effects	DNEL	208	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	8,2	mg/kg	
Consumer	Human - dermal	Short term, local effects	DNEL	1,5	mg/cm ²	
Consumer	Human - inhalation	Long term, local effects	DNEL	104	mg/m3	
Consumer	Human - dermal	Long term, local effects	DNEL	1,5	mg/cm ²	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	74,3	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	8,2	mg/kg bw/day	
Consumer	Human - oral	Long term, local effects	DNEL	1,5	mg/cm ²	
Industrial / commercial	Human - dermal	Long term, local effects	DNEL	1,5	mg/cm ²	
Industrial / commercial	Human - inhalation	Long term, local effects	DNEL	208	mg/m3	
Industrial / commercial	Human - inhalation	Long term, systemic effects	DNEL	208	mg/m3	
Industrial / commercial	Human - dermal	Long term, systemic effects	DNEL	13,67	mg/kg	
Industrial / commercial	Human - dermal	Short term, local effects	DNEL	1,5	mg/cm ²	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	208	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	1,5	mg/cm ²	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	416	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	13,67	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	348,4	mg/m3	
Workers / employees	Human - dermal	Short term, local effects	DNEL	1,5	mg/cm ²	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE), (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE), (11) = Inhalable fraction (Directive 2004/37/CE), (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0.002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU), (9) = Respirable fraction (2017/164/EU, 2017/2398/EU), (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage. ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here. Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques. These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles with side protection (EN 166).

GB

Page 3 of 6
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 19.10.2022 / 0011
 Replacing version dated / version: 12.05.2022 / 0010
 Valid from: 19.10.2022
 PDF print date: 19.10.2022
 COSMO® SP-711.110

(COSMOFEN RM Pulver)

Skin protection - Hand protection:
 Chemical resistant protective gloves (EN ISO 374).
 Recommended
 Protective gloves in butyl rubber (EN ISO 374).
 Minimum layer thickness in mm:
 >= 0,7
 Permeation time (penetration time) in minutes:
 >= 60
 The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
 The recommended maximum wearing time is 50% of breakthrough time.
 Protective hand cream recommended.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
 Normally not necessary.
 If OES or MEL is exceeded.
 If applicable, filter P2 (EN 143), code colour white
 Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
 Not applicable

Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
 No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Solid
 Colour: White
 Odour: Characteristic
 Melting point/freezing point: There is no information available on this parameter.
 Boiling point or initial boiling point and boiling range: There is no information available on this parameter.
 Flammability: Flammable
 Lower explosion limit: Does not apply to solids.
 Upper explosion limit: Does not apply to solids.
 Flash point: Does not apply to solids.
 Auto-ignition temperature: >400 °C
 Decomposition temperature: There is no information available on this parameter.
 pH: Mixture is non-soluble (in water).
 Kinematic viscosity: Does not apply to solids.
 Solubility: Insoluble
 Partition coefficient n-octanol/water (log value): Does not apply to mixtures.
 Vapour pressure: There is no information available on this parameter.
 Density and/or relative density: -1,3 g/cm3
 Relative vapour density: Does not apply to solids.

9.2 Other information

Explosives: Product is not explosive.
 Oxidizing solids: There is no information available on this parameter.
 Evaporation rate: n.a.

SECTION 10: Stability and reactivity

10.1 Reactivity

Not to be expected

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

None known

10.5 Incompatible materials

See also section 7.

None known

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification).

COSMO® SP-711.110

(COSMOFEN RM Pulver)						
Toxicity / effect	Endpo int	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.

Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm)						
Toxicity / effect	Endpo int	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/k g	Rat	OECD 425 (Acute Oral Toxicity - Up-and-Down Procedure)	
Acute toxicity, by dermal route:	LD50	>5000	mg/k g	Rabbit		
Acute toxicity, by inhalation:	LC50	>6,8	mg/l/ 4h	Rat		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Mechanical irritation possible.
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Not sensitizing
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	(Ames-Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.
Specific target organ toxicity - single exposure (STOT-SE):						Not irritant (respiratory tract).
Symptoms:						mucous membrane irritation, coughing, respiratory distress, drying of the skin.
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAE L	3500	mg/k g/d	Rat		90d
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAE C	10	mg/m 3	Rat		90d

Dibenzoyl peroxide						
Toxicity / effect	Endpo int	Value	Unit	Organis m	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/k g	Rat		
Acute toxicity, by inhalation:	LC50	>24,3	mg/l/ 4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Germ cell mutagenicity:						Negative
Carcinogenicity:	NOAE L	1000	mg/k g			Negative29d

(GB)

Page 4 of 6
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 19.10.2022 / 0011
 Replacing version dated / version: 12.05.2022 / 0010
 Valid from: 19.10.2022
 PDF print date: 19.10.2022
 COSMO® SP-711.110

(COSMOFEN RM Pulver)

Symptoms:						cornea opacity, mucous membrane irritation
-----------	--	--	--	--	--	--

Methyl methacrylate						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>6000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	29,8	mg/l/4h	Rat		Vapours
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant
Respiratory or skin sensitisation:				Human being		Skin Sens. 1
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:						Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	2000	ppm	Rat		
Aspiration hazard:						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	25	ppm	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	
Symptoms:						breathing difficulties, respiratory distress, drowsiness, drop in blood pressure, coughing, headaches, fatigue, mucous membrane irritation, watering eyes, mental confusion

Silicon dioxide						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	> 2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Aspiration hazard:						No

11.2. Information on other hazards

COSMO® SP-711.110

(COSMOFEN RM Pulver)

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

COSMO® SP-711.110

(COSMOFEN RM Pulver)

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment:							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.

Titanium dioxide (in powder form containing 1 % or more of particles with aerodynamic diameter <= 10 µm)

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	16	mg/l	Pseudokirchneriella subcapitata	U.S. EPA-600/9-78-018	
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:	BCF	42d	9,6				Not to be expected
12.3. Bioaccumulative potential:	BCF	14d	19-352				Oncorhynchus mykiss
12.4. Mobility in soil:							Negative
12.5. Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Toxicity to bacteria:			>5000	mg/l	Escherichia coli		
Toxicity to bacteria:	LC0	24h	>10000	mg/l	Pseudomonas fluorescens		
Toxicity to annelids:	NOEC/N OEL		>1000	mg/kg	Eisenia foetida		
Water solubility:							Insoluble 20 °C

Dibenzoyl peroxide

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	0,0602	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/N OEL	96h	0,0316	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	0,11	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/N OEL	21d	>0,01	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	0,0711	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/N OEL	72h	0,02	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	

Page 5 of 6
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 19.10.2022 / 0011
 Replacing version dated / version: 12.05.2022 / 0010
 Valid from: 19.10.2022
 PDF print date: 19.10.2022
 COSMO® SP-711.110

(COSMOFEN RM Pulver)

12.2. Persistence and degradability:		28d	68-71	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		66,6			OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.3. Bioaccumulative potential:	Log Pow		3,2			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	22 °C
12.4. Mobility in soil:	Log Koc		3,8			OECD 121 (Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using HPLC)	
Toxicity to bacteria:	EC50	30m in	35	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Methyl methacrylate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to algae:	NOEC/NOEL	72h	49	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	37	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to fish:	LC50	96h	130	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	69	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	96h	37	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	>95	%		OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		1,32 -1,38			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	A notable biological accumulation potential is not to be expected (LogPow 1-3).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Silicon dioxide							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	EC0	96h	>1000	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC0	24h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	ErC50	72h	>=10000	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	

12.2. Persistence and degradability:							Inorganic products cannot be eliminated from water through biological purification methods.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:
 The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
 08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances
 Recommendation:
 Sewage disposal shall be discouraged.
 Pay attention to local and national official regulations.
 E.g. suitable incineration plant.
 E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations.
 Empty container completely.
 Uncontaminated packaging can be recycled.
 Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number or ID number: 3077
Transport by road/by rail (ADR/RID)
 14.2. UN proper shipping name:
 UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIBENZOYL PEROXIDE)
 14.3. Transport hazard class(es): 9
 14.4. Packing group: III
 Classification code: M7
 LQ: 5 kg environmentally hazardous
 14.5. Environmental hazards:
 Tunnel restriction code: -

Transport by sea (IMDG-code)

14.2. UN proper shipping name:
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIBENZOYL PEROXIDE)
 14.3. Transport hazard class(es): 9
 14.4. Packing group: III
 EmS: F-A, S-F
 Marine Pollutant: Yes
 14.5. Environmental hazards: environmentally hazardous

Transport by air (IATA)

14.2. UN proper shipping name:
 Environmentally hazardous substance, solid, n.o.s. (DIBENZOYL PEROXIDE)
 14.3. Transport hazard class(es): 9
 14.4. Packing group: III
 14.5. Environmental hazards: environmentally hazardous

14.5. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
 All persons involved in transporting must observe safety regulations.
 Precautions must be taken to prevent damage.
14.7. Maritime transport in bulk according to IMO instruments
 Freight as packaged goods rather than in bulk, therefore not applicable.
 Minimum amount regulations have not been taken into account.
 Danger code and packing code on request.
 Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:
 Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)
 Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
E2		200	500

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 0 g/l

Observe incident regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 8
 Employee training in handling dangerous goods is required.
 These details refer to the product as it is delivered.
 Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 19.10.2022 / 0011
 Replacing version dated / version: 12.05.2022 / 0010
 Valid from: 19.10.2022
 PDF print date: 19.10.2022
 COSMO® SP-711.110

(COSMOFEN RM Pulver)

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Chronic 2, H411	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H225 Highly flammable liquid and vapour.
 H241 Heating may cause a fire or explosion.
 H351 Suspected of causing cancer by inhalation.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

Skin Sens. — Skin sensitization
 Aquatic Chronic — Hazardous to the aquatic environment - chronic
 Carc. — Carcinogenicity
 Org. Perox. — Organic peroxide
 Eye Irrit. — Eye irritation
 Aquatic Acute — Hazardous to the aquatic environment - acute
 Flam. Liq. — Flammable liquid
 Skin Irrit. — Skin irritation
 STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

Key literature references and sources

for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
 Guidelines for the preparation of safety data sheets as amended (ECHA).
 Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
 Safety data sheets for the constituent substances.
 ECHA Homepage - Information about chemicals.
 GESTIS Substance Database (Germany).
 German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
 EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
 National Lists of Occupational Exposure Limits for each country as amended.
 Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
 AOX Adsorbable organic halogen compounds
 approx. approximately
 Art., Art. no. Article number
 ASTM ASTM International (American Society for Testing and Materials)
 ATE Acute Toxicity Estimate
 BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
 BCF Bioconcentration factor
 BSEF The International Bromine Council
 bw body weight
 CAS Chemical Abstracts Service
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
 CMR carcinogenic, mutagenic, reproductive toxic
 DMEL Derived Minimum Effect Level
 DNEL Derived No Effect Level
 DOC Dissolved organic carbon
 dw dry weight
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
 EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
 EC European Community
 ECHA European Chemicals Agency
 ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
 EEC European Economic Community
 EINECS European Inventory of Existing Commercial Chemical Substances
 ELINCS European List of Notified Chemical Substances
 EN European Norms
 EPA United States Environmental Protection Agency (United States of America)
 ErCx, EuCx, Erlx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
 etc. et cetera
 EU European Union
 EVAL Ethylene-vinyl alcohol copolymer
 Fax. Fax number
 gen. general
 GHS Globally Harmonized System of Classification and Labelling of Chemicals
 GWP Global warming potential
 Koc Adsorption coefficient of organic carbon in the soil
 Kow octanol-water partition coefficient
 IARC International Agency for Research on Cancer
 IATA International Air Transport Association
 IBC (Code) International Bulk Chemical (Code)
 IMDG-code International Maritime Code for Dangerous Goods
 incl. including, inclusive
 IUCLID International Uniform Chemical Information Database
 IUPAC International Union for Pure Applied Chemistry
 LC50 Lethal Concentration to 50 % of a test population
 LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
 Log Kow, Log Pow Logarithm of octanol-water partition coefficient
 LQ Limited Quantities
 MARPOL International Convention for the Prevention of Marine Pollution from Ships
 n.a. not applicable
 n.av. not available
 n.c. not checked
 n.d.a. no data available
 NIOSH National Institute for Occupational Safety and Health (USA)
 NLP No-longer-Polymer
 NOEC, NOEL No Observed Effect Concentration/Level
 OECD Organisation for Economic Co-operation and Development
 org. organic
 OSHA Occupational Safety and Health Administration (USA)
 PBT persistent, bioaccumulative and toxic
 PE Polyethylene
 PNEC Predicted No Effect Concentration
 ppm parts per million
 PVC Polyvinylchloride
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
 SVHC Substances of Very High Concern
 Tel. Telephone
 TOC Total organic carbon
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
 VOC Volatile organic compounds
 vPvB very persistent and very bioaccumulative
 wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.