

Trade name: VarseoSmile TriniQ

Current version : 4.1.0, issued: 28.10.2024

Replaced version: 3.1.0, issued: 19.07.2024

Region: GB

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

1.1 Product identifier

Trade name

VarseoSmile TriniQ

Valid for all colours and fillings

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

Relevant identified uses of the substance or mixture

Resin for 3D printing of dental restorations

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

BEGO Bremer Goldschlägerei

Wilh. Herbst GmbH & Co. KG

Wilhelm-Herbst-Str. 1

28359 Bremen

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Information provided by / telephone

Research & Development Department - Materials, alloys and ceramics; +49/ 421/ 2028 – 130 (Chief Development Officer alloys)

Advice on Safety Data Sheet

msds@bego.com

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Aquatic Chronic 4; H413

Repr. 1B; H360Fd

Skin Sens. 1; H317

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS07



GHS08

Signal word

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Danger

Hazardous component(s) to be indicated on label:

Benzeneacetic acid, .alpha.-oxo-, methyl ester
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Hazard statement(s)

H317 May cause an allergic skin reaction.
H360Fd May damage fertility. Suspected of damaging the unborn child.
H413 May cause long lasting harmful effects to aquatic life.

Hazard statements (EU)

EUH204 Contains isocyanates. May produce an allergic reaction.

Precautionary statement(s)

P201 Obtain special instructions before use.
P280 Wear protective gloves/protective clothing/eye protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container to a facility in accordance with local and national regulations.

Supplemental label elements

"Restricted to professional users"

2.3 Other hazards

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid			
	- 935-411-2 - 01-2119980659-17	Aquatic Chronic 4; H413	>= 50.00 - < 70.00	wt%
2	2-propenoic acid, 2-hydroxyethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and 2,2"-oxybis[ethanol]			
	72162-39-1 676-714-7 - -	Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 5.00 - < 10.00	wt%
3	Benzeneacetic acid, .alpha.-oxo-, methyl ester			
	15206-55-0 239-263-3 - 01-2120101338-67	Skin Sens. 1; H317	< 5.00	wt%
4	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			

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	75980-60-8 278-355-8 015-203-00-X 01-2119972295-29	Aquatic Chronic 2; H411 Skin Sens. 1B; H317 Repr. 1B; H360Fd	< 2.50	wt%
5	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]			
	13463-67-7 236-675-5 022-006-00-2 01-2119489379-17	-	< 2.50	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In all cases of doubt, or when sickness symptoms persist, seek medical attention.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with copious amounts of water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

No data 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; Extinguishing powder; Water spray jet; Alcohol-resistant foam

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO₂); Phosphorus oxides

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away from ignition sources. Do not inhale vapours.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

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6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

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

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Keep away from food, drink and animal feeding stuffs. Do not inhale vapours. Avoid contact with eyes and skin. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Pay attention to general rules of internal fire prevention. Take precautionary measures against electrostatic loading (earthing necessary during loading operations).

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7	236-675-5
	List of approved workplace exposure limits (WELs) / EH40		
	Titanium dioxide		
	total inhalable dust		
	WEL long-term (8-hr TWA reference period)	10	mg/m ³
	List of approved workplace exposure limits (WELs) / EH40		
	Titanium dioxide		
	respirable dust		
	WEL long-term (8-hr TWA reference period)	4	mg/m ³
2	Dust		
	List of approved workplace exposure limits (WELs) / EH40		
	Dust respirable		

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	WEL long-term (8-hr TWA reference period)	4	mg/m ³
	Comments	see Definition 44 "Dust"	
List of approved workplace exposure limits (WELs) / EH40			
Dust inhalable			
	WEL long-term (8-hr TWA reference period)	10	mg/m ³
	Comments	see Definition 44 "Dust"	

DNEL, DMEL and PNEC values**DNEL values (worker)**

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid			- 935-411-2
	dermal	Long term (chronic)	systemic	140 mg/kg bw/day
	inhalative	Long term (chronic)	systemic	98.7 mg/m ³
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			75980-60-8 278-355-8
	dermal	Long term (chronic)	systemic	0.233 mg/kg bw/day
	inhalative	Long term (chronic)	systemic	0.822 mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid			- 935-411-2
	oral	Long term (chronic)	systemic	5 mg/kg bw/day
	dermal	Long term (chronic)	systemic	50 mg/kg bw/day
	inhalative	Long term (chronic)	systemic	17.4 mg/m ³
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			75980-60-8 278-355-8
	oral	Long term (chronic)	systemic	83.3 µg/kg bw/day
	dermal	Long term (chronic)	systemic	83.3 µg/kg bw/day
	inhalative	Long term (chronic)	systemic	0.145 mg/m ³

PNEC values

No	Substance name		CAS / EC no
	ecological compartment	Type	Value
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester		15206-55-0 239-263-3
	water	fresh water	0.069 mg/L
	water	marine water	0.007 mg/L
	water	fresh water sediment	0.47 mg/kg dry weight
	water	marine water sediment	0.047 mg/kg dry weight
	soil	-	0.027 mg/kg dry weight
	sewage treatment plant	-	39 mg/L
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide		75980-60-8 278-355-8
	water	fresh water	1.4 µg/L
	water	marine water	0.14 µg/L
	water	fresh water sediment	0.115 mg/kg dry weight
	water	marine water sediment	11.5 µg/kg dry weight
	soil	-	22.2 µg/kg dry weight

8.2 Exposure controls

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Appropriate engineering controls

Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material In case of short-term contact / splash protection:

Appropriate Material nitrile
 Material thickness 0.12 mm
 Breakthrough time 30 - 60 min

Appropriate Material In case of longer-term contact:

Appropriate Material nitrile
 Appropriate Material neoprene
 Material thickness 0.2 mm
 Breakthrough time 240 - 480 min
 Appropriate Material nitrile
 Breakthrough time > 480 min

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	
liquid	
Form	
Liquid	
Colour	
Various, depending on coloration	
Odour	
No data available	
pH value	
Not applicable	
reason for missing pH	substance/mixture is non-polar/aprotic
Source	supplier
Boiling point / boiling range	
Value	supplier 150 °C
Source	supplier
Melting point/freezing point	
No data available	
Decomposition temperature	
No data available	

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Flash point			
Value	110	°C	
Source	supplier		
Ignition temperature			
No data available			
Flammability			
No data available			
Lower explosion limit			
No data available			
Upper explosion limit			
No data available			
Vapour pressure			
No data available			
Relative vapour density			
No data available			
Relative density			
No data available			
Density			
Value	1.25 - 1.5	g/cm ³	
Reference temperature	20	°C	
Source	supplier		
Solubility			
No data available			
Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
log Pow	~	1.9	
Reference temperature		23	°C
Method	OECD 117		
Source	ECHA		
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
log Pow	~	3.1	
Reference temperature		23	°C
with reference to	pH: 6.4		
Method	OECD 117		
Source	ECHA		
Kinematic viscosity			
Value	2500 - 6000	mPa*s	
Type	dynamic		
Source	supplier		
Particle characteristics			
No data available			

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

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10.3 Possibility of hazardous reactions

None, when used as directed.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Protect from sun.

10.5 Incompatible materials

strong oxidizing agents

10.6 Hazardous decomposition products

None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 423		
Source	ECHA		
2	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
LD50	6800	- 10000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
3	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
LD50	>	5000	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute inhalational toxicity			
No data available			

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
Method	OECD 439		
Evaluation	non-irritant		
2	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Method	Federal Register 38 No 187 § 1500 .41 (skin)		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

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3	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Duration of exposure		24	h
Species	rabbit		
Method	Federal Register 38 No 187 § 1500 .41 (skin)		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
Method	OECD 437		
Evaluation	non-irritant		
2	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Method	OECD 405		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Species	rabbit		
Method	Fed. Reg. 38, No. 187, § 1500.42, p. 27019 of Sept. 27, 1973		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
Route of exposure	Skin		
Method	OECD 429		
Evaluation	non-sensitizing		
2	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Route of exposure	Skin		
Source	ECHA / weight of evidence		
Evaluation	sensitizing		
Evaluation/classification	Based on available data, the classification criteria are met.		
3	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	sensitizing		
Evaluation/classification	Based on available data, the classification criteria are met.		

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Type of examination	in vitro gene mutation study in bacteria		
Species	S. typhimurium TA 1535, TA 1537, TA 98, TA 100 and E. coli WP2		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	In vitro Mammalian Chromosomal Aberration Test		
Species	Chinese hamster lung (CHL)		
Method	OECD 473		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Type of examination	in vitro gene mutation study in mammalian cells		

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Species	Chinese hamster V79 cells
Method	OECD 476
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Route of exposure		oral	
NOAEL		1000	mg/kg bw/d
Type of examination		Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test	
Species		rat	
Method		OECD 422	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Route of exposure		oral	
NOAEL		60	mg/kg bw/d
Type of examination		Reproductive studies - one generation	
Species		rat	
specific effect		causing atrophy of the testes	
Method		OECD 421	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are met.	
Route of exposure		oral	
NOAEL		150	mg/kg bw/d
Type of examination		Prenatal Developmental Toxicity Study	
Species		rat	
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are met.	

Carcinogenicity	
No data available	

STOT - single exposure	
No data available	

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Route of exposure		oral	
NOAEL		1000	mg/kg bw/d
Species		rat	
Method		OECD 422	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Route of exposure		oral	
NOAEL		50	mg/kg bw/d
Duration of exposure		3	months
Species		rat	
Method		OECD 408	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Aspiration hazard	
No data available	

Endocrine disrupting properties	
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Pursuant to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605, the product does not contain any endocrine disruptors in a concentration of 0.1% weight by weight and above.

11.2 Information on other hazards

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
LC50	>	120	mg/l
Duration of exposure		96	h
Species	Danio rerio		
Method	OECD 203		
Source	ECHA		
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
LC50		1.4	mg/l
Duration of exposure		96	h
Species	Cyprinus carpio		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
NOEC		65.6	µg/l
Species	Danio rerio		
Method	OECD 210		
Source	ECHA		

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
EC50		120	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
EC50		3.53	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
NOEC	>	22.4	µg/l
Species	Daphnia magna		
Method	OECD 211		
Source	ECHA		

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.

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1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
EL50	>	100	mg/l
Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		
2	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
EC50	>	94.4	mg/l
Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		
3	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
EC50	>	2.01	mg/l
Duration of exposure		72	h
Species	Raphidocelis subcapitata		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No	Substance name	CAS no.	EC no.
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
EC50	>	1000	mg/l
Species	activated sludge		
Method	OECD 209		
Source	ECHA		

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	Reaction products of 4,4'-isopropylidenediphenol, ethoxylated and methacrylic acid	-	935-411-2
Type	aerobic biodegradation		
Value		24	%
Duration		28	day(s)
Method	OECD 301 D		
Evaluation	inherently biodegradable		
2	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
Type	aerobic biodegradation		
Value	90	- 100	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation/classification	Readily biodegradable		
3	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
Type	aerobic biodegradation		
Value	0	- 10	%
Duration		28	day(s)
Method	OECD 301 F		
Source	ECHA		
Evaluation	not readily biodegradable		

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
BCF	18	- 72	
Species	Cyprinus carpio		

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Source	ECHA		
Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	Benzeneacetic acid, .alpha.-oxo-, methyl ester	15206-55-0	239-263-3
log Pow	~	1.9	
Reference temperature		23	°C
Method	OECD 117		
Source	ECHA		
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8
log Pow	~	3.1	
Reference temperature		23	°C
with reference to	pH: 6.4		
Method	OECD 117		
Source	ECHA		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
VarseoSmile TriniQ	
Valid for all colours and fillings	
PBT assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.
vPvB assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Endocrine disrupting properties

Endocrine disrupting properties	
Product Name	
VarseoSmile TriniQ	
Valid for all colours and fillings	
Pursuant to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605, the product does not contain any endocrine disruptors in a concentration of 0.1% weight by weight and above.	

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.
dispose of in accordance with local regulation.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 UN number or ID number**

Not classified as dangerous in the meaning of transport regulations.

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14.2 UN proper shipping name

Not classified as dangerous in the meaning of transport regulations.

14.3 Transport hazard class(es)

Not classified as dangerous in the meaning of transport regulations.

14.4 Packing group

Not classified as dangerous in the meaning of transport regulations.

14.5 Environmental hazards

Not classified as dangerous in the meaning of transport regulations.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
EU regulations**Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

The product contains following substance(s) meeting the criteria in Article 57 in association with Article 59 of the REACH regulation ((EC) 1907/2006) that are placed on the list of candidates considered for inclusion in annex XIV (substances subject to Authorisation).

No	Substance name	CAS no.	EC no.
1	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	diiron trioxide	1309-37-1	215-168-2	75
2	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	278-355-8	75
3	Iron hydroxide oxide yellow	51274-00-1	257-098-5	75
4	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7	236-675-5	75
5	triiron-tetraoxide	1317-61-9	215-277-5	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

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National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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Prod-ID 790128