

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product Name, Item #:****Kinetics SHIELD Ceramic Base**Variants:

Kinetics SHIELD Ceramic Base, item #: KCB01

Kinetics SHIELD Ceramic Base Natural Pink, item #: KCB902

Kinetics SHIELD Ceramic Base Milky White, item #: KCB906

Kinetics SHIELD Ceramic Base Classic Nude, item #: KCB916

Kinetics SHIELD Ceramic Base Dark Sand , item #: KCB927

Kinetics SHIELD Ceramic Base Light Rose, item #: KCB928

Kinetics SHIELD Ceramic Base Light Sand item #: KCB929

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

Identified uses

Cosmetic.

Uses advised against

Manufacture of food products.

1.3. Details of the supplier of the safety data sheet

Responsible person:

Kinetics Nail Systems, Ltd

3K Kurzemes pr., Riga, Latvia, LV-1067, Latvia

TEL: +(371) 6 7295 260

FAX: +(371) 6 7873 525

e-mail: info@kineticsbeauty.comweb: www.kineticsbeauty.comE-mail of person responsible for Product Safety Data Sheet:info@kineticsbeauty.com**1.4. Emergency telephone number**

EU:112

Emergency telephone for other regions to be filled out by local business

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

According to regulation (EC) No 1272/2008:

Skin Irrit. 2 (H315) - Skin corrosion/ irritation, Hazard Category 2.**Skin Sens. 1A (H317) - Sensitisation — Skin, hazard category 1A.****Eye Irrit. 2 (H319) - Serious eye damage/eye irritation, Hazard Category 2.****STOT SE 3 (H335) - Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation.****Aquatic Chronic 3 (H412) - Long-term (chronic) aquatic hazard, Category 3.**

Important adverse physicochemical, human health and environmental effects:

Causes skin irritation.**May cause an allergic skin reaction****Causes serious eye irritation.****May cause respiratory irritation.****Harmful to aquatic life with long lasting effects.****2.2. Label elements**

According to regulation (EC) No 1272/2008:



Warning

- H315 Causes skin irritation.**
- H317 May cause an allergic skin reaction.**
- H319 Causes serious eye irritation.**
- H335 May cause respiratory irritation.**
- H412 Harmful to aquatic life with long lasting effects.**

Contain: Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate; Methacrylic acid, monoester with propane-1,2-diol; Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate; Ethylene phosphite.

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P261 Avoid breathing mist/vapours/spray.
- P264 Wash hands/ affected body parts thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/eye protection.
- P302+P352 IF ON SKIN: Wash with plenty of water/soap.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/ attention.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container to in accordance with local/ regional/ national/ international regulation.

2.3. Other hazards

Product does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH (Regulation (EC) No 1907/2006).

Toxicological information/Ecological information: Based on available data the mixture does not contain ingredients considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration of 0.1% or more.

See section 11 for more detailed information on health effects and symptoms.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not relevant.

3.2. Mixtures

Mixture of acrylic monomers and other ingredients.

Ingredient name (INCI)	INDEX No.	CAS No.	EINECS/ EC No.	Conc. (%)	Classification Regulation (EC) 1272/2008 (CLP)	Type
BIS-HEA POLY(1,4-BUTANEDIOL)-9/IPDI COPOLYMER	N/A	N/A	N/A	45-50	Not classified	

Kinetics SHIELD Ceramic Base

Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate [ISOBORNYL ACRYLATE]	607-756-00-6	5888-33-5	227-561-6	10-20	Skin Sens. 1A, H317	[1]
Methacrylic acid, monoester with propane-1,2-diol [HYDROXYPROPYL METHACRYLATE]	N/A	27813-02-1	248-666-3	10-15	Skin Sens. 1, H317 Eye Irrit. 2, H319	[1]
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	N/A	7534-94-3	231-403-1	5-10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 3, H412	[1]
Reaction product of 2-hydroxyethyl methacrylate and 2,2-dimethyl-1,3-propanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and hexanedioic acid [BIS-HEMA POLYNEOPENTYL GLYCOL ADIPATE/IPDI COPOLYMER]	N/A	82339-16-0	810-131-2	5-10	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Ethylene phosphite [ETHYLENE PHOSPHITE]	N/A	1003-11-8	621-992-7	5-10	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
Propylidynetrimethyl trimethacrylate [TRIMETHYLOLPROPANE TRIMETHACRYLATE]	N/A	3290-92-4	221-950-4	1-3	Aquatic Chronic 2, H411	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

See section 16 for the full text of the R and H phrases declared above.

Occupational exposure limits, if available, are listed in section 8.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

[5] SEVESO SUBSTANCE

SECTION 4: First aid measures

4.1. Description of first aid measures	
General advice:	Remove contaminated clothing.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If necessary, call a poison centre or physician. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Skin contact:	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. In the event of any complaints or symptoms, avoid further exposure. Get medical attention if symptoms persist.
Eye contact:	Flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if symptoms persist.

Kinetics SHIELD Ceramic Base

Ingestion:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
4.2. Most important symptoms and effects, both acute and delayed	
Eye contact:	Irritating to the eyes. Symptoms might be as follows: Conjunctivitis, lacrimation, redness, pain or irritation, reversible cornea damage and swelling and watering of the eyes.
Inhalation:	May cause nose, throat and respiratory tract irritation. Symptoms might be as follows: Irritation, coughing, shortness of breath, dizziness, headache or nausea, fatigue, unconsciousness.
Skin contact:	Irritating to the skin, might cause skins sensitization. Symptoms might be as follows: Redness, inflammation, rash, urticaria, pain or irritation, blistering and dermatitis.
Ingestion:	No significant effects or critical hazards known.
4.3. Indication of any immediate medical attention and special treatment needed	
Specific treatments:	Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

See section 11 for more detailed information on health effects and symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media	
Suitable extinguishing media:	Alcohol-resistant foam, dry chemical powder, carbon dioxide, water mist.
Unsuitable extinguishing media:	Do not use full power water jet.
5.2. Special hazards arising from the substance or mixture	
	In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials: carbon dioxide carbon monoxide Other unidentified organic and inorganic substances. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterways, sewer or drain.
5.3. Advice for firefighters	
	If water is used to cool closed containers to prevent pressure build-up, fog nozzles are preferred. Full protective equipment, including self-contained breathing apparatus is needed to protect fire-fighters from exposure to coating's hazardous ingredients and hazardous decomposition products. During emergency conditions, overexposure to decomposition products may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
	<i>For non-emergency personnel:</i> No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Follow fire-fighting measures. Avoid release to the environment.





	<i>For emergency responders:</i> If specialised clothing is required to deal with the spillage, take note of any information in Section “Exposure controls/personal protection” on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2. Environmental precautions	
	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be very harmful to the environment if released in large quantities. Collect spillage.
6.3. Methods and material for containment and cleaning up	
	<i>Small spill:</i> Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. <i>Large spill:</i> Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
6.4. Reference to other sections	
	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	
Protective measures:	Put on appropriate personal protective equipment (see Section “Exposure controls/ personal protection”). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene:	Good industrial hygiene practices should be observed. Provide sufficient air exchange and/or exhaust in work rooms. Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Take off all contaminated clothing immediately. Use of dispensing equipment is recommended to minimise the risk of skin or eye contact. See also Section 8 for additional information on hygiene measures.
7.2. Conditions for safe storage, including any incompatibilities	
Storage:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be

	carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Empty container may retain product residues (vapour or liquid).
7.3. Specific end use(s)	
Industrial sector specific solutions:	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
Occupational exposure limits:	<p>Limit values are laid down throughout the EU, but each Member State establishes its own national OELs, often going beyond EU legislation. OELs are set by competent national authorities and other relevant institutions.</p> <p>EU (IOELV): <i>Not available.</i></p> <p>United Kingdom (EH40): <i>Not available.</i></p> <p>Latvia (AER, reg.325/2011): <i>Not available.</i></p> <p>Germany (TRGS-900): <i>Not available.</i></p>
Recommended monitoring procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
8.2. Exposure controls	
Appropriate engineering Controls:	Ensure good ventilation/extraction. Reduce inhalation hazards in minimising the occupational exposure. Comply with the Occupational Exposure Limits.
Individual protection measures:	
Hygiene measures:	<p>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.</p> <p>Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.</p>
Respiratory protection	 Ensure adequate ventilation. An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area. Filter type: A
Eye/face protection:	 Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
Skin protection:	  Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

Kinetics SHIELD Ceramic Base

	<p>nitrile rubber (NBR; ≥ 0.4 mm thickness). Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): nitrile rubber (NBR; ≥ 0.4 mm thickness). This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed, then the gloves should be replaced. Wear suitable protective clothing.</p>
Environmental exposure controls:	
	According to available technology.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties	
a) Physical state	Viscous liquid.
b) Colour	Transparent.
c) Odour	Characteristic.
d) Melting point/freezing point	Not available.
e) Initial boiling point and boiling range	Not available.
f) Flammability	Not available.
g) Lower and upper explosion limit	Not available.
h) Flash point	Not available.
i) Auto-ignition temperature	Not available.
j) Decomposition temperature	Not available.
k) pH	Not available.
l) Kinematic viscosity	Not available.
m) Solubility (-ies)	Not available.
n) Partition coefficient n-octanol/water (log value)	Not available.
o) Vapour pressure	Not available.
p) Density and/or relative density	Not available.
q) Relative vapour density	Not available.
r) Particle characteristics	Not available.
9.2. Other information	
Impurity	Not available
Explosive properties	Not available.
Oxidising properties	Not available

SECTION 10: Stability and reactivity

10.1. Reactivity	
	No hazardous reactions if stored and handled as prescribed/indicated.
10.2. Chemical stability	
	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	
	Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.
10.4. Conditions to avoid	

Kinetics SHIELD Ceramic Base

	Avoid high temperatures and sources of ignition. Ultraviolet light. Avoid light effect. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution. Un-clean conditions to avoid during storage. Heat.
10.5. Incompatible materials	
	Peroxides, amines, sulphur compounds, heavy metal ions, alkalis, reducing agents and oxidizing agents.
10.6. Hazardous decomposition products	
	Fumes produced when heated to decomposition may include: Toxic carbon monoxide, carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity

Data on the product or its components:

Mixture/ Ingredient name	Result	Species	Dose	Exposure
Kinetics SHIELD Ceramic Base	ATE Oral	-	5 000 mg/kg bw	-
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate [ISOBORNYL ACRYLATE]	LD ₅₀ Oral	Rat	5 750 mg/kg bw	-
	LD ₅₀ Dermal	Rabbit	> 3 000 mg/kg bw	-
Methacrylic acid, monoester with propane-1,2-diol [HYDROXYPROPYL METHACRYLATE]	LD ₅₀ Oral	Rat	>= 2 000 mg/kg bw	-
	LD ₅₀ Dermal	Rabbit	> 5 000 mg/kg bw	-
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	LD ₅₀ Oral	Rat	3.16 mL/kg bw	-
	LD ₅₀ Dermal	Rabbit	> 3 000 mg/kg bw	-
Ethylene phosphite [ETHYLENE PHOSPHITE]	ATE Oral	-	500 mg/kg bw	-
Propylidynetrimethyl trimethacrylate [TRIMETHYLOLPROPANE TRIMETHACRYLATE]	LD ₅₀ Oral	Rat	> 2 000 mg/kg bw	-
	LC ₅₀ Inhalation	Rat	12.2 mg/L air	4 h
	LD ₅₀ Dermal	Rabbit	> 2 000 mg/kg bw	-

Conclusion/Summary: According to classification method described in CLP regulation, this product has ATE (oral) value of 5 000 mg per kg of body weight - the product is NOT classified as harmful or toxic if swallowed.

Serious eye damage/irritation

Data on the product or its components:

Mixture/ Ingredient name	Effect
Methacrylic acid, monoester with propane-1,2-diol [HYDROXYPROPYL METHACRYLATE]	Category 2B (mildly irritating to eyes) based on GHS criteria. Species: Rabbit. Amount applied (volume): 0.1 ml. Duration of treatment / exposure: Till end of observation period Observation period (in vivo): 24, 48, 72 h, 4, 5, 7 days

Kinetics SHIELD Ceramic Base

	Guideline: Appraisal of the safety of Chemicals in foods, drugs and cosmetics by staff of the Division of Pharmacology, FDA acc. to Draize.
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	Slightly irritating.
Reaction product of 2-hydroxyethyl methacrylate and 2,2-dimethyl-1,3-propanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and hexanedioic acid [BIS-HEMA POLYNEOPENTYL GLYCOL ADIPATE/IPDI COPOLYMER]	Category 2B (irritating to eyes) based on GHS criteria.
Ethylene phosphite [ETHYLENE PHOSPHITE]	Irritating.
Conclusion/Summary:	According to classification method described in CLP regulation, this product is classified as irritating to the eyes (Eye Irrit. 2, H319).
Skin corrosion/irritation Data on the product or its components:	
Mixture/ Ingredient name	Effect
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	Irritating.
Reaction product of 2-hydroxyethyl methacrylate and 2,2-dimethyl-1,3-propanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and hexanedioic acid [BIS-HEMA POLYNEOPENTYL GLYCOL ADIPATE/IPDI COPOLYMER]	Irritating to the skin.
Ethylene phosphite [ETHYLENE PHOSPHITE]	Irritating.
Conclusion/Summary:	According to classification method described in CLP regulation, this product is classified as irritating to the skin (Skin Irrit. 2, H315).
Respiratory or skin sensitisation Data on the product or its components:	
Mixture/ Ingredient name	Effect
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate [ISOBORNYL ACRYLATE]	Category 1A (skin sensitising). Species: Mouse Guideline: OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Methacrylic acid, monoester with propane-1,2-diol [HYDROXYPROPYL METHACRYLATE]	Skin sensitizer (May cause an allergic skin reaction).

Kinetics SHIELD Ceramic Base

Conclusion/Summary:	According to classification method described in CLP regulation, this product is classified as sensitising to the skin (Skin Sens. 1A, H317).
Germ cell mutagenicity Data on the product or its components:	
	No data on adverse effects on humans or animals are available.
Conclusion/Summary:	Based on available data, classification criteria not met.
Carcinogenicity Data on the product or its components:	
	No data on adverse effects on humans or animals are available.
Conclusion/Summary:	Based on available data, classification criteria not met.
Reproductive toxicity Data on the product or its components:	
	No data on adverse effects on humans or animals are available.
Conclusion/Summary:	Based on available data, classification criteria not met.
Specific target organ toxicity - Single exposure Data on the product or its components:	
Mixture/ Ingredient name	Effect
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	Hazard category: Specific target organ toxicity - Single Exposure, Category 3 Hazard statement: May cause respiratory irritation. Affected organs: respiratory tract. Route of exposure: inhalation.
Ethylene phosphite [ETHYLENE PHOSPHITE]	Hazard category: Specific target organ toxicity - Single Exposure, Category 3 Hazard statement: May cause respiratory irritation. Affected organs: respiratory tract Route of exposure: inhalation
Conclusion/Summary:	According to classification method described in CLP regulation, this product is classified as mixture that can be harmful if inhaled - May cause respiratory irritation (STOT SE 3, H335).
Specific target organ toxicity - Repeated exposure Data on the product or its components:	
	No data on adverse effects on humans or animals are available.
Conclusion/Summary:	Based on available data, classification criteria not met.
Aspiration hazard	

Kinetics SHIELD Ceramic Base

Data on the product or its components:	
	No data on adverse effects on humans or animals are available.
Conclusion/Summary:	Based on available data, classification criteria not met.
Potential acute health effects	
Inhalation:	May cause nose and throat irritation. May cause respiratory irritation.
Skin contact:	Causes skin sensitisation and skin irritation.
Eye contact:	Causes serious eye irritation.
Ingestion:	No significant effects or critical hazards known.
Symptoms related to the physical, chemical and toxicological characteristics	
Inhalation:	Irritation, coughing, shortness of breath, dizziness, headache or nausea, fatigue, unconsciousness.
Skin contact:	Redness, inflammation, rash, urticaria, pain or irritation, blistering and dermatitis.
Eye contact:	Conjunctivitis, lacrimation, redness, pain or irritation, reversible cornea damage and swelling and watering of the eyes.
Ingestion:	No specific symptoms known.
Delayed and immediate effects and also chronic effects from short and long term exposure	
Short term exposure:	
Potential immediate effects:	Not available.
Potential delayed effects:	Not available.
Long term exposure:	
Potential immediate effects:	Not available.
Potential delayed effects:	Not available.
11.2. Information on other hazards	
Endocrine disrupting properties	
Based on available data the mixture does not contain ingredients considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration of 0.1% or more.	
Other information	
	No additional information is available.

SECTION 12: Ecological information

12.1. Toxicity						
Aquatic toxicity						
Data on the product or its components:						
Mixture/ Ingredient name	Species	Water media type	Exposure	Dose	Effect conc.	Notes
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	Fish - Danio rerio	freshwater	96 h	LC ₅₀	1.79 mg/L	
	Crustaceans - Daphnia magna	freshwater	48 h	EC ₅₀	> 2.57 mg/L	
	Crustaceans - Daphnia magna	freshwater	21 d	NOEC	0.233 mg/L	

Kinetics SHIELD Ceramic Base

	Algae - Pseudokirchneriella subcapitata	freshwater	72 h	EC ₅₀	2.28 mg/L	
Propylidynetrimethyl trimethacrylate [TRIMETHYLOLPROPANE TRIMETHACRYLATE]	Fish - Oncorhynchus mykiss	freshwater	96 h	LC ₅₀	2 mg/L	
	Fish - Pimephales promelas	freshwater	32 d	NOEC	0.138 mg/L	
	Crustacean - Daphnia magna	freshwater	48 h	EC ₅₀	> 9.22 mg/L	
	Algae - Raphidocelis subcapitata	freshwater	72 h	NOEC	0.177 mg/L	
	Microorganisms - activated sludge	freshwater	3 h	EC ₅₀	> 1 000 mg/L	

Conclusion/Summary: According to classification method described in CLP regulation, this product is classified as harmful to aquatic life with long lasting effects (Aquatic Chronic 3, H412).

12.2. Persistence and degradability

Data on the product or its components:

Mixture/ Ingredient name	CAS no.	Degradability	Test method/ Guideline
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	7534-94-3	Readily biodegradable. Degradation (CO ₂ evolution), 28 d: 70%	OECD Guideline 310 (Ready Biodegradability - CO ₂ in Sealed Vessels (Headspace Test))
Propylidynetrimethyl trimethacrylate [TRIMETHYLOLPROPANE TRIMETHACRYLATE]	3290-92-4	Inherently biodegradable. Degradation (CO ₂ evolution), 28 d.: 29%	OECD Guideline 301 B (Ready Biodegradability: CO ₂ Evolution Test)

12.3. Bioaccumulative potential

Data on the product or its components:

Mixture/ Ingredient name	Effect
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	BCF: 37 dimensionless
Propylidynetrimethyl trimethacrylate [TRIMETHYLOLPROPANE TRIMETHACRYLATE]	BCF (aquatic species): 5.25 L/kg ww

12.4. Mobility in soil

Data on the product or its components:

Mixture/ Ingredient name	Effect
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate [ISOBORNYL METHACRYLATE]	Mean adsorption coefficient log <i>K_{oc}</i> of 3.7.
Propylidynetrimethyl trimethacrylate [TRIMETHYLOLPROPANE TRIMETHACRYLATE]	log <i>K_{oc}</i> : 2.071 at 25°C <i>K_{oc}</i> : 1 757 at 20 °C

12.5. Results of PBT and vPvB assessment

Kinetics SHIELD Ceramic Base

	Regarding all available data on biotic and abiotic degradation, bioaccumulation and toxicity it can be stated that the substance does not fulfil the PBT criteria (not PBT) and not the vPvB criteria (not vPvB).
12.6. Endocrine disrupting properties	
Data on the product or its components:	
	No data on adverse effects aquatic organisms are available.
Conclusion/Summary:	Based on available data the mixture does not contain ingredients considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration of 0.1% or more.
12.7. Other adverse effects	
	No other significant effects or critical hazards known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Product:	
Methods of disposal:	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste:	Within the present knowledge of the supplier, this product IS regarded as hazardous waste, as defined by Directive 2008/98/EC and EU regulation 1357/2014.
European waste catalogue (EWC):	20 01 27* paint, inks, adhesives and resins containing dangerous substances Note: Always check the given waste codes according to the actual conditions of manufacturing, formulation or use.
Packaging:	
Methods of disposal:	The generation of waste should be avoided or minimised wherever possible. Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special precautions:	This material and its container must be disposed of in a safe way.

SECTION 14: Transport information

International transport regulations (ADR/RID, IMDG or ICAO/IATA):				
	ADR	RID	IMDG	IATA
14.1. UN number or ID number	-	-	-	-
14.2. UN proper shipping name	-			
14.3. Transport hazard class(es)	-	-	-	-
14.4. Packing group	-	-	-	-

Kinetics SHIELD Ceramic Base

14.5. Environmental hazards	-	-	-	-
14.6. Special precautions for user	-	-	-	-
Other information	-	-	-	-
14.7. Maritime transport in bulk according to IMO instruments	Not applicable.			

SECTION 15: Regulatory information

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

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

ADR - the European Agreement concerning the International Carriage of Dangerous Goods by Road, concluded at Geneva on 30 September 1957, as amended.

RID - the Regulations concerning the International Carriage of Dangerous Goods by Rail, appearing as Appendix C to the Convention concerning International Carriage by Rail (COTIF) concluded at Vilnius on 3 June 1999, as amended.

ADN - the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways concluded at Geneva on 26 May 2000, as amended.

IMDG Code - International Maritime Dangerous Goods Code.

IATA/ICAO: ICAO - International Civil Aviation Organization. IATA - International Air Transport Association.

MARPOL 73/78 - International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978.

COUNCIL DIRECTIVE 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, with amendments (2004/42/CE).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance).

Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives Text with EEA relevance.

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH):

Annex XIV - List of substances subject to authorization:

Substances of very high concern: None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Not applicable.

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms:

Full text of abbreviations

CLP: Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008]
 ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 RID: International Rule for Transport of Dangerous Substances by Railway
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 CAS: Chemical Abstracts Service
 EINECS: European Inventory of Existing Commercial Chemical Substances
 LC50: Median lethal concentration

	LD50: Median lethal dose REACH: Registration, Evaluation and Authorisation of Chemicals PBT: Persistent, bio-accumulative and toxic vPvB: Very persistent, very bio-accumulative bw: Body weight
Full text of classifications and H statements [CLP/ GHS]:	Acute Tox. 4, Acute toxicity (oral), Hazard Category 4; H302 Harmful if swallowed. Skin Irrit. 2, Skin corrosion/ irritation, Hazard Category 2; H315 Causes skin irritation. Skin Sens. 1A, 1, Sensitisation — Skin, hazard category 1A, 1; H317 May cause an allergic skin reaction. Eye Irrit. 2, Serious eye damage/eye irritation, Hazard Category 2; H319 Causes serious eye irritation. STOT SE 3, Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation; H335 May cause respiratory irritation. Aquatic Chronic 2, Long-term (chronic) aquatic hazard, Category 2; H411 Toxic to aquatic life with long lasting effects. Aquatic Chronic 3, Long-term (chronic) aquatic hazard, Category 3; H412 Harmful to aquatic life with long lasting effects.
Classification system:	Classification for health effects: <i>conventional (calculation) method is used or generic/specific concentration limits:</i> Skin Irrit. 2, H315 Skin Sens. 1A, H317 Eye Irrit. 2, H319 STOT SE 3, H335 Classification for physico-chemical effects: No applicable. Classification for environmental effects: <i>conventional (calculation) method is used or generic/specific concentration limits:</i> Aquatic Chronic 3, H412
Training advice:	
	In addition to health, safety and environmental training programs for their workers, companies must ensure that workers read, understand and apply the requirements of this SDS.
Used literature:	
	European Chemical Agency's homepage (http://echa.europa.eu/). Safety data sheets of individual components.
DISCLAIMER OF LIABILITY:	
	The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or method of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable.

END OF SAFETY DATA SHEET