SMILE MATERIALS

SAFETY DATA SHEET
SMILE MINERALS
RECYCLED SOLID SURFACE

13 September 2026
Revision V.1

1. Product and Company Identification
A) This product is a combination of solid surface and 100% pre and post-consumer recycled content PETG used.
B) Recommended use of the chemical and restrictions on use:
Interior finishing materials (Kitchen Surfaces, Counter Surfaces, Inner wall finishing)

2. Hazards Identification
A) Hazard Risk Classification: N/A
B) Label elements including precautionary statements
Symbol: N/A
Hazard Risk Statement: N/A
Precautionary Statement: N/A
C) Other Hazard Risk which is not included in the classification criteria (NFPA)
Health:1
Fire:1
Reactivity: 0
The product as such is not hazardous.
The hazards of this product are associated mainly with its processing.
Operations such as sawing, routing, drilling and sanding can generate dust.

WARNING!
May form combustible dust concentrations in air (during processing). High concentrations of dust can irritate eyes, nose and respiratory system and cause coughing and sneezing. Solid Surface does not emit gas at room temperature. At higher temperatures, small amounts of methyl methacrylate and butyl acrylate can be released. The amounts are dependent upon temperature, time and other variables. Additives in this product do not present a respiration hazard unless the product is ground to a powder of respirable size and the dust is inhaled. All dusts are potentially injurious to the respiratory tract if respirable particles are generated and inhaled.

Dyes used in the process
- Contain 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

May produce an allergic reaction when have concentration of dust from sanding.

3. Composition/Information on Ingredients
Identification of the article: Mineral-filled polymethylmethacrylate, copolyester (CAS# 25640-14-6), Water based dyes.

Hazardous dye components
- Poly Methyl Methacrylate
- Aluminium Trihydrate
- Methyl Methacrylate
- Copolymer Colorants
- titanium dioxide oral: LD50 = > 5000 mg/kg
- 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one
- LC50 = 0,5 mg/l (dusts or mists); dermal: LD50= > 2000 mg/kg; oral: LD50 = 670 - 784 mg/kg Skin Sens. 1; H317: >= 0,05 - 100
- 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
- inhalation: LC50 = 0,171 mg/l (dusts or mists); dermal:
- LD50 = 92,4 mg/kg; oral: LD50 = 64 mg/kg Skin Corr. 1C; H314: >= 0,6 - 100 Skin Irrit. 2;
- H315: >= 0,06 - < 0,6 Eye Dam. 1; H318: >= 0,6 - 100 Eye Irrit. 2; H319: >= 0,06 - < 0,6
- Skin Sens. 1A; H317: >= 0,0015 - 100
- Aquatic Acute 1; H400: M=100
- Aquatic Chronic 1; H410: M=100

4. First Aid Measures

After inhalation
Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin
Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains. In case of skin reactions, consult a physician.

After contact with eyes
Wash with large amounts of water until no evidence of chemical remains (at least 15 20 minutes).
Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

After ingestion
If vomiting occurs, keep head lower than hips to help prevent aspiration.

5. Fire-Fighting Measures

1. Flammable properties: Solid Surface can be combusted only with difficulty
2. Extinguishing media: Water, Dry chemical, CO2
3. Hazardous gases/vapor s produced in fire are carbon monoxide, methyl methacrylate, aldehydes, Nitrogen oxides (NOx), hydrogen cyanide (HCN, prussic acid), hydrocarbons
4. Fire fighting instructions
5. Wear self contained breathing apparatus
6. Keep personnel removed and upwind of fire

Special hazards arising from the substance or mixture
Hazardous decomposition products: Hydrocarbons, Pyrolysis products, toxic.

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6. Accidental Release Measures
A) Safeguard (Personnel): Use appropriate personal protective during clean up
B) Spill cleanup: Recover undamaged and minimally contaminated material for reuse and reclamation
C) Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.
D) Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Non-sparking tools should be used.

7. Handling and Storage
A) Avoid breathing dust. Avoid breathing fumes generated during sawing, routing or drilling. Wear a suitable respirator.
B) Storage : Store in a dry and cool place
C) Do not breathe dust. Do not breathe vapours or fumes that may be evolved during processing. Wash hands before breaks and at the end of workday. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

8. Exposure Controls and Personal Protection
A) Chemical exposure standard, biological exposure standard: No information is available
B) Engineering controls (ventilation): Use ventilation that is adequate to keep employee exposure to air borne concentration below exposure limits.
C) Personal protection
Protective equipment: Eye/Face/hand Protection
Wear safety glasses during operations such as sawing, sanding, drilling or routing
D) Dust. Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink.

Exposure limits (EH40)
Information on solid surface component toxicological effects
Acute oral toxicity. Acute toxicity estimate : > 2,000 mg/kg
Acute inhalation toxicity. Acute toxicity estimate : > 5 mg
Information on the dye component toxicological effects

Titanium dioxide
Long-term exposure limit (8-hour TWA reference period) inhalable dust 10 mg/m^3
Long-term exposure limit (8-hour TWA reference period) Respirable dust 4mg/m^3

Aluminium oxides, inhalable dust - 10 TWA (8 h)
Calcium carbonate, respirable - 4 TWA (8 h)
- Silica, amorphous, inhalable dust - 6 TWA (8 h)
- Silica, amorphous, respirable dust - 2.4 TWA (8 h)

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one
Worker DNEL, long-term inhalation systemic 6,81 mg/m^3
Worker DNEL, long-term dermal systemic 0,966 mg/kg

5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Worker DNEL, long-term inhalation local 0,02 mg/m³
Worker DNEL, acute inhalation local 0,04 mg/m³

Environmental compartment Value

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one
Freshwater 0,00403 mg/l
Freshwater (intermittent releases) 0,0011 mg/l
Marine water 0,000403 mg/l
Freshwater sediment 0,0499 mg/kg
Marine sediment 0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP) 1,03 mg/l
Soil 3 mg/kg

5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Freshwater 0,00339 mg/l
Freshwater (intermittent releases) 0,00339 mg/l
Marine water 0,00339 mg/l
Freshwater sediment 0,027 mg/kg
Marine sediment 0,027 mg/kg
Micro-organisms in sewage treatment plants (STP) 0,23 mg/l
Soil 0,01 mg/kg

PNEC value
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one
Freshwater 0,00403 mg/l
Freshwater (intermittent releases) 0,0011 mg/l
Marine water 0,000403 mg/l
Freshwater sediment 0,0499 mg/kg
Marine sediment 0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP) 1,03 mg/l
Soil 3 mg/kg

5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Freshwater 0,00339 mg/l
Freshwater (intermittent releases) 0,00339 mg/l
Marine water 0,00339 mg/l
Freshwater sediment 0,027 mg/kg
Marine sediment 0,027 mg/kg
Micro-organisms in sewage treatment plants (STP) 0,23 mg/l
Soil 0,01 mg/kgs

Disposal considerations
Waste treatment methods

Can be landfilled or incinerated, when in compliance with local regulations.

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	Standard	Unit	Result
Physical Properties			
Density	ISO 1183 (2019)	g/cm³	1.453
Weight (12 mm panel)	N/A	kg/m²	17.4
Shore D Hardness	ISO 868 (2023)	D	88.1
Heat Deflection Temperature	ISO 75-2 (2013)	°C	61.0
Coefficient of linear thermal expansion	ISO 11359-2 (2021)	µm/m°C	54.7 §
Mechanical Properties			
Charpy Impact Resistance	ISO 179-1 (2023)	kJ/m²	1.47
Flexural Strength	ISO 178 (2019)	MPa	42.22
Flexural Modulus	ISO 178 (2019)	MPa	3,295
Tensile Modulus	ISO 527-2 (2012)	MPa	3,109
Tensile Elongation at Break	ISO 527-2 (2012)	%	1
Tensile Strength (break)	ISO 527-2 (2012)	MPa	26.3
Ball Impact Resistance	EN ISO 19712-2		Pass +
Surface Durability			
Abrasion Resistance	DIN 68861-2 (2020)	Class	2A (>1,000 revs)
Scratch Resistance	DIN 68861-4 (2013)	Class	4B ++
Heat & Biological Resistance			
Wet Heat Resistance	ISO 19712-2		Pass
Dry Heat Resistance	ISO 19712-2		Pass
Fungi Development	ISO 846 - Method A		1a**

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	Standard	Unit	Result
Food Contact Safety			
Global Migration	DIN EN 1186-5 (2002)		
Acetic acid 3% (2h / 70°C)			Pass
Ethanol 10% (2h / 70°C)			Pass
Vegetable oil (2h / 70°C)			Pending †
Health and Indoor Air Quality			
VOC Emissions (Indoor Air Quality)	Eurofins	Rating	Gold Equiv.
Fire Performance*			
Surface Spread of Flame	BS 476-7:1997	Class	2

§ Measured over −40°C to +40°C
† no cracks/damage at max height of 239 cm
†† Scratch resistance: DIN 68861-4 Class 4B (11 N). Abrasion resistance: DIN 68861-2:2020 Class 2A. These results meet or exceed the surface-resistance levels specified by DGUV 315-410 for office work surfaces and exceed the 5 N scratch-resistance criterion used in the EU Ecolabel furniture surface-finish requirements.
† Vegetable oil migration testing is currently in progress.
* This is an indicative rating based on BS 476-7:1997 testing. Full European fire classification to EN 13501-1 is currently in progress.
** no growth visible to the naked eye

Results above are reported for non-fire-retardant material and are indicative of the tested samples. The published data sheet notes that recycled feedstock variation can affect panel properties; use the latest specification for project decisions.

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10. Stability and Reactivity

A) Pyrolysate : Acrylate vapor release because of frictional heat(
B) Toxic decomposition product: CO, Acrylate monomers, smog
C) Toxic reaction: N/A
D) Other information: In the presence of an ignition source is a potential dust explosion hazard

1. Breath equipment : Use breathing equipment t when it's poorly ventilated
2. Safety gloves: Use safety gloves
3. Personal protection: Use earplug and safety shoes

11. Toxicological Information

A) Possible exposed path

1. Acute breathe toxic: Yes (Dust)
2. Acute oral toxic: No
3. Skin contact: Yes
4. Eye contact: Yes

B) Physical, chemical and toxicological symptom: No information is available
C) Influence by short-term and Long-term exposure

1. Acute toxic

-Oral: N/A
-Skin: N/A

2. Inhalation irritant caused by heated acrylate vapor
3. Skin irritant caused by heated acrylate vapor
4. Eye irritant caused by heated acrylate vapor
5. Inhalation irritant: No information is available
6. Skin irritable substance: No information is available
7. Carcinogenic substance -IARC:3 (non-classified) -ACGIH:non-classified
8. Reproductive substance: No information is available
9. Organ, whole body toxic substance (once exposure):No information is available
10. Organ, whole body toxic substance (repeated exposure):No information is available

Dye content

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
oral	LD50 mg/kg	670 - 784	Rat	Manufacturer	OECD 401
dermal	LD50 mg/kg	> 2000	Rat	Manufacturer	OECD 402
inhalation vapour	ATE	0,5 mg/l			
inhalation (4 h) dust/mist	LC50	0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
oral	LD50	64 mg/kg	Rat	Manufacturer	
dermal	LD50 mg/kg	92,4	Rabbit	Manufacturer	
inhalation vapour	ATE	0,5 mg/l			
inhalation (4 h) dust/mist	LC50 mg/l	0,171	Rat	Manufacturer	OECD 403

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12. Ecological Information
A) Biodegradation:N/A
B) Bioaccumulation:N/A
C) Aquatic Toxicity:N/A
D) Biodegradation. Data are not available.
E) Persistence. Data are not available.
F) Mobility in soil. Data are not available.

13. Disposal Considerations
A) Dispose in accordance with federal, state and local regulation.
B) The owner of the material is responsible for proper waste disposal
C) Caution: Use breathing equipment to avoid breathing dust.

14. Transport Information
A) Product is not classified for any mode of transportation
B) Caution: Flat-Pallet Stacking

15. Regulatory Information
A) Not classified as hazardous according to criteria of occupation safety and health acts
B) Not classified as hazardous according to criteria of toxic chemicals control.

16. Other Information

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information given is intended only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

It is the exclusive responsibility of the recipient of our product to find out the applicable laws and regulations prior to using the product and to comply with them in all respects. Please note that applicable national and international laws and regulations may change and it is the responsibility of the recipient to follow such changes.

This information is based on technical information deemed reliable and is subject to revision as additional information is made available.

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PLASTICS

MINERALS

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