SMILE MATERIALS

SMILE MINERALS DATA SHEETS

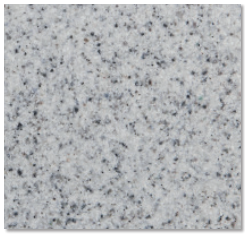
DATA SHEETS

Made from recycled PET and reclaimed solid surface, Smile Minerals RSS gives valuable materials a new life. As recycled feedstocks naturally vary, composition and performance may differ slightly between panels and batches. Technical data are based on tested samples and are indicative rather than guaranteed specification values.

↓Chalk and Shale Recycled Solid Surface

CORE

CHALK
100% Recycled Solid Surface



SHALE
100% Recycled Solid Surface

RECYCLED SOLID SURFACE

	Standard	Unit	Result
Physical Properties			
Density	ISO 1183 (2019)	g/cm^3	1.453
Weight (12mm panel)	N/A	kg/m^2	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)		54.7 §
Mechanical Properties			
Charpy Impact Resistance	ISO 179-1 (2023)	kJ/m^2	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 (>500 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**

RECYCLED SOLID SURFACE

	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 239cm
† † 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.

REIMAGINED MATERIALS,
DESIGNED TO INSPIRE
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