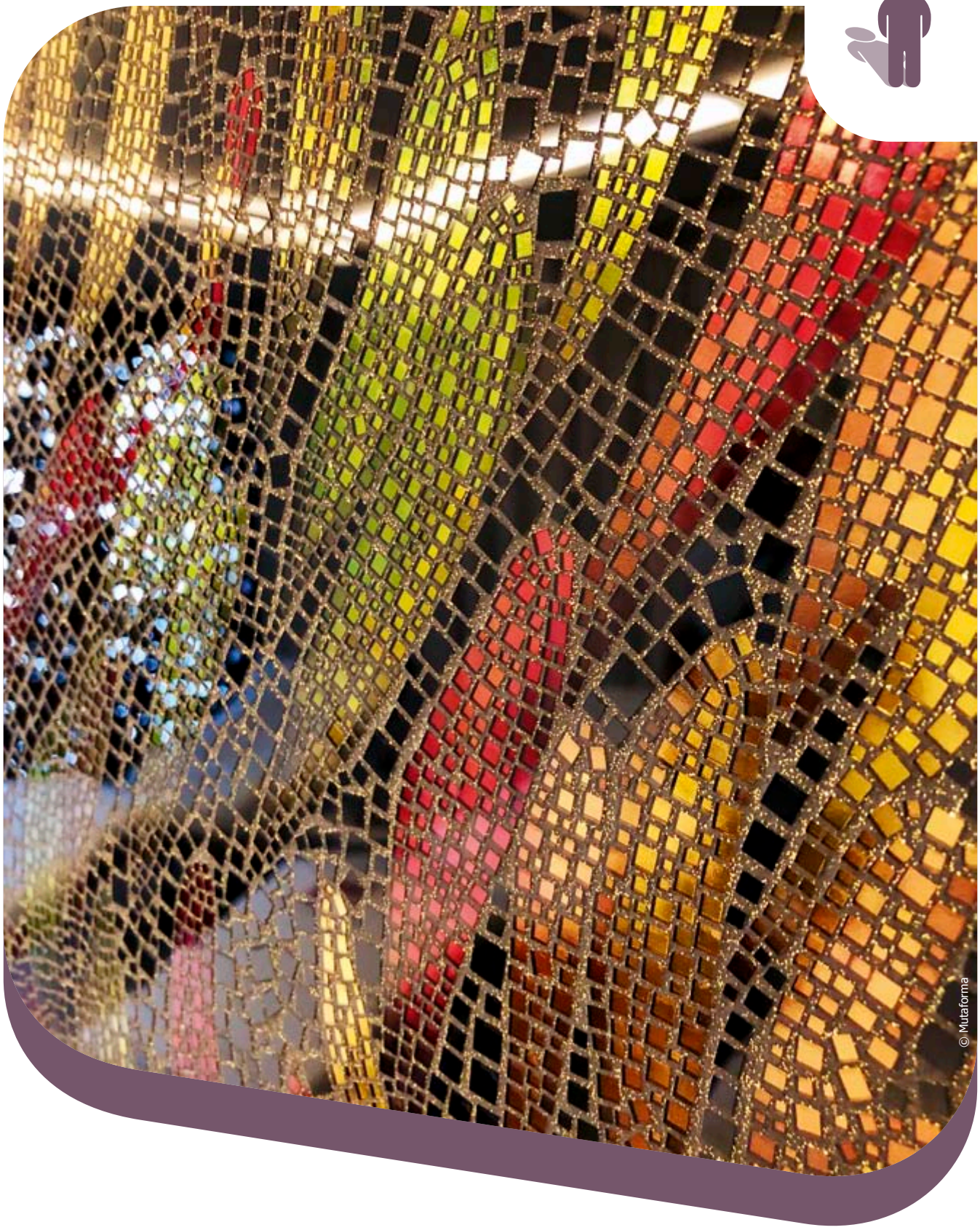
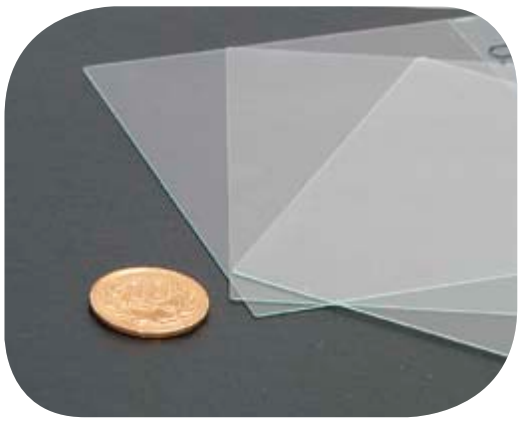
PILKINGTON



Pilkington **Microwhite™**

Extremely thin extra clear float glass

NSG GROUP



Pilkington **Microwhite**™
Made to precise standards

Pilkington **Microwhite**™ is an extremely thin, high-grade float glass manufactured to precise standards.
It is made according to the highest specifications with very low thickness tolerances, to ensure flat and uniform products, suitable for a variety of applications.

Pilkington **Microwhite**™ is a low-iron extra-clear glass manufactured using the float glass process. The result is a very pure, clear glass that has the added benefit of increased light transmission.

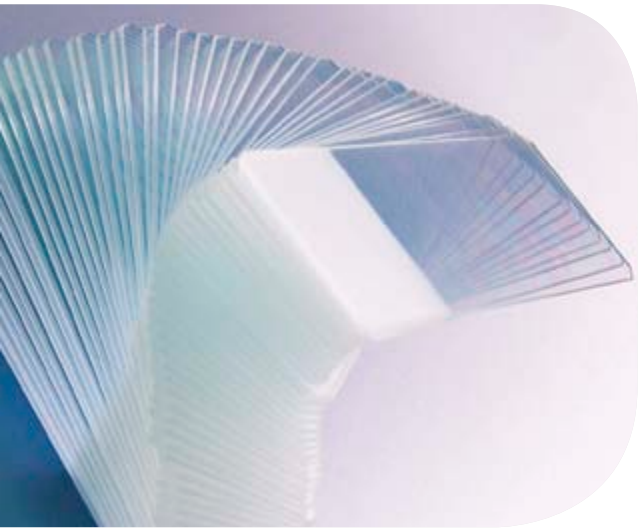
Applications

The excellent plane and low tolerances of thickness make Pilkington **Microwhite**™ an ideal product for a wide range of applications. Pilkington **Microwhite**™ is used for the production of microscope slides, cosmetic mirrors, glass mosaics, chromatographic plates, LCD photo masks, automotive and technical glass, PC display screens and tablet PC's. Due to its superior light and energy transmission Pilkington **Microwhite**™ is well suited for use in solar concentrator applications.

Product features:

- high-grade thin float glass offering excellent plane and low thickness tolerances;
- flat and uniform product;
- excellent optical transmission;
- neutral edge colour;
- superior light and energy transmission;
- free of fluorescent reflections;
- resistant to chemicals;
- improved wetability through a silane coating*;
- extended shelf life;
- pre-cut to customer specifications.

* Optional



Pilkington **Microwhite**™ – technical data

Typical composition (% by weight)

Constituents	Pilkington **Microwhite**™
SiO_2	72,3
Al_2O_3	0,5
Fe_2O_3	< 0,02
Na_2O	13,3
CaO	8,8
K_2O	0,4
MgO	4,3

Typical light transmittance (TL) % (according to EN 410 & ISO 9050)

Thickness	Pilkington **Microwhite**™
1,0 mm	91,7
1,1 mm	91,7
1,3 mm	91,6

Typical solar direct transmittance (Te) % (according to EN 410)

Thickness	Pilkington **Microwhite**™
1,0 mm	91,6
1,1 mm	91,5
1,3 mm	91,4

Minimum and maximum sizes

Size	Pilkington **Microwhite**™
Minimum	200 × 200 mm
Maximum	1600 × 2000 mm*

Thickness range and tolerances

Pilkington **Microwhite**™	
Thickness	Thickness tolerances
1,00 mm	0,95 – 1,05 mm
1,10 mm	1,00 – 1,20 mm
1,30 mm	1,20 – 1,40 mm

General characteristic values

Pilkington **Microwhite**™		
Characteristic	Symbol	Value and unit
Density (at 18°C)	ρ	2500 kg/m³
Hardness (Knoop)**	$HK_{0,1/20}$	6 GPa
Young's modulus (modulus of elasticity)	E	7×10^{10} Pa
Poisson's ratio	μ	0,2
Specific heat capacity	c_p	$0,72\times10^{3}$ J/(kg·K)
Nominal value of average coefficient of linear expansion between 20°C and 300°C	α	9×10^{-6}/K
Resistance against temperature differential and sudden temperature change***		40 K
Thermal conductivity	λ	1 W/(m·K)
Mean refractive index to visible radiation (at 589,3 nm)	n	1,5
Emissivity (corrected)	ε	0,837
Stress-optical coefficient (at 514 nm)	C	$2,72\times10^{-6}$ MPa
Strain point ($10^{14,5}$ Poise)	T	525°C
Upper annealing point ($10^{13,0}$ Poise)	T	555°C
Softening point ($10^{7,6}$ Poise)	T	725°C
Alkaline resistance (ISO 695)		Class 2
Acid resistance (ISO 8424)		Class 3
Hydrolytic resistance (ISO 719)		Class 3

* Bigger sizes can be discussed depending on shipping method.

** Knoop Hardness in accordance with ISO 9385.

*** Generally accepted value that is influenced by edge quality and glass type.

Please note: An interleaving powder material which can be easily washed off is used. Pilkington **Microwhite**™ must always be processed, installed and maintained in accordance with our specialist Handling and Processing Guidelines.

CE marking confirms that a product complies with its relevant harmonised European Norm.
The Declaration of Performance for each product, including declared values, can be found at www.pilkington.com/CE

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