



Extremely thin float glass
Pilkington **Microfloat™**
Pilkington **Microwhite™**





Pilkington **Microfloat™** Pilkington **Microwhite™** Ultra thin float glass

Pilkington **Microfloat™** and Pilkington **Microwhite™** are extremely thin, high-grade float glass manufactured to precise standards.

The extremely thin float glasses are manufactured by the standard float glass process. Pilkington **Microfloat™** is the classic version manufactured from clear float. The newest version, Pilkington **Microwhite™** is manufactured from a low iron composition which produces a very pure, clear glass and has the added benefit of increased light transmission.

They are made according to the highest specifications with very low thickness tolerances, to ensure flat and uniform products, suitable for a variety of applications.

Product features:

- Extremely thin float glass
- Tight thickness and flatness tolerances
- Excellent optical transmission
- Improved wettability through a silane coating*
- Pre-cut to customer specifications
- Excellent optical transmission
- Resistant to chemicals
- Other thicknesses may be available on request

Additional features of Pilkington **Microwhite™**:

- Neutral edge color
- Superior light and energy transmittance

* Optional

Applications

- Automotive and technical glass
- LCD photo masks
- Chromatographic plates
- Microscope slides
- PC and tablet PC's display screens
- Cosmetic mirrors
- Pilkington **Microwhite™** is ideal for use in solar concentrator applications.



Pilkington **Microfloat™** and Pilkington **Microwhite™**

Technical data

Typical composition (% by weight)

Constituents	Pilkington Microfloat™	Pilkington Microwhite™
SiO ₂	72.0 – 73.0	72.3
Al ₂ O ₃	0.5 – 0.7	0.5
Fe ₂ O ₃	0.07 – 0.13	< 0.02
Na ₂ O	13.0 – 13.5	13.3
CaO	8.6 – 8.9	8.8
K ₂ O	0.2 – 0.4	0.4
MgO	4.1 – 4.3	4.3

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

Thickness	Pilkington Microfloat™	Pilkington Microwhite™
1.0 mm	91.2	91.7
1.1 mm	91.2	91.7
1.3 mm	91.1	91.6
1.4 mm	91.0	91.6
1.6 mm	90.8	91.5

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

Thickness	Pilkington Microfloat™	Pilkington Microwhite™
1.0 mm	89.1	91.6
1.1 mm	88.8	91.5
1.3 mm	88.2	91.4
1.4 mm	87.9	91.3
1.6 mm	87.4	91.2

Size	Pilkington Microfloat™ & Pilkington Microwhite™
1.0 mm	400 × 600 mm
1.6 mm	1000 × 1800 mm

Glass edge color impression

Pilkington Microfloat™	Pilkington Microwhite™
Slight Greenish	Neutral

Pilkington Microfloat™ & 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
1.40 mm*	1.30 – 1.50 mm
1.60 mm	1.50 – 1.70 mm

* Available upon request

Pilkington Microfloat™ & Pilkington Microwhite™	
Mean refractive index to visible radiation, n	1.5
Density, ρ [kg/m ³]	2500
Average coefficient of linear expansion between 20°C and 300°C, α [K ⁻¹]	9 × 10 ⁻⁶
Thermal conductivity, λ [W/mK]	1
Young's modulus, E [Pa]	7 × 10 ¹⁰
Poisson's ratio, μ	0.2
Alkaline resistance	Class 2
Acid resistance	Class 3
Hydrolytic resistance	Class 3

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

This publication provides only a general description of the products. Further, more detailed information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, code of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it. Pilkington "Microfloat" and "Microwhite" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.



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