Pilkington Microfloat<sup>™</sup> Putting performance under the microscope.

## Pilkington Microfloat<sup>™</sup>

Ultra-thin float glass made to exacting standards, suitable for a variety of applications.

Pilkington **Microfloat<sup>™</sup>** is a high-grade float glass made to precise standards. Its excellent plane and low tolerances of thickness make it ideal for a wide range of uses, primarily microscope slides but also cosmetic mirrors, chromatographic plates, photomasks, automotive and technical glass, dependent on its thickness.

The glass is produced as a normal float glass. A silane coating applied during manufacture to improve its wetability, to give an even film particularly when used as microscope slides, is available on request.



Chemical and physical properties of Pilkington Microfloat™

Typical composition:					
% by Weight	SiO <sub>2</sub>	A1 <sub>2</sub> O <sub>3</sub>	$Fe_2O_3$	RO(CaO+MgO)	$R_2O(Na_2O+K_2O)$
	72-73%	0.5-0.7%	0.10-0.130%	12.7-13.1%	13.2-13.6%
Transmission			Poissons ratio		0.224
$T_L$ (Auge* D65) for glass thicknesses of	1mm $T_L = 91$ . 1.2mm $T_L = 91$ .		Strain point		Logη = 14.5; T ~ 530°C
	1.6mm $T_L = 90.8\% \pm 1\%$		Transformation temperature		Logη = 12.3; T ~ 567°C
Refractive index	(Nad) = 1.52		Annealing point		Logη = 13.0; T ~ 557°C
Density	2490 kg/m <sup>3</sup>		Dilatometric start of softening		Logη = 10.3; T ~ 598°C
Coefficient of thermal expansion	$\alpha = 9 \ge 10^{-6} \text{ K}^{-1}$ @ 50-350°C		Softening point ( $\eta$ = Viscosity in Pa.s)		) Logη = 7.6; T ~ 726°C
Thermal conductivity	al conductivity 0.9 W/mK @ 248°C 1.6 W/mK @ 463°C		Alkaline resistance (ISO 695)		class 2
			Acid resistance	(ISO 8424)	class 3
Young's modulus	73 GN/m <sup>2</sup>		Hydrolytic resis	stance (ISO 719)	class 3



## **Benefits**

- High-grade thin float glass offering excellent plane and low thickness tolerances
- Silane coated for improved wetability, ensuring an even film
- Excellent optical transmission
- Free of fluorescent reflections
- Resistant to chemicals
- Extended shelf life
- Available in several thicknesses:
  - 0.95 1.05mm (microscope slides)
  - 1.0 1.2mm (microscope slides, cosmetic mirrors)
  - 1.2 1.4mm (chromatographic plates,
  - cosmetic mirrors, technical glass)
  - 1.5 1.7mm (photomasks, automotive,
  - technical glass)
- Other thicknesses may be available on request
- Glass is pre-cut to your specification

Please note: we use a plastic powder as interleaving material, which can easily be washed off.

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