

IRPEN has invested heavily in research and manufacturing techniques to develop a wide portfolio of cast acrylic sheets to suit many applications.

As our latest innovation we introduce **Policril Recycled**, acrylic cast sheets produced with 100% recycled methyl methacrylate monomer (R-MMA).

R-MMA used in the production of **Policril Recycled** cast acrylic sheets is obtained from PMMA scraps, once depolymerized and distilled.

Policril Recycled respects the environment and participates in preserving a more sustainable future, maintaining the same properties as **POLICRIL** sheets produced with synthetic monomer.

Why do our customers & distributors choose **Policril Recycled**?

- Reduction of raw material usage
- Reduction of carbon foot-print from sheet production
- Guarantee of premium quality
- Reduction of wastes from sheets processing
- Increasing of the life-cycle of cast acrylic
- Respect for the environment and our planet

Product range

Policril Recycled is available in various thicknesses in the most popular colors, such as transparent, opal white, dense white and black.

Color codes:

- 010001 – Clear
 - 120002 – Diffusing White
 - 130001 – Opaque White
 - 930002 – Opaque Black
- Other requests on consultation.



PO 01 Recycled

Propierties	Values	Unit	Test method
General			
Density ⁽¹⁾	1,19	g/cm ³	ISO 1183, Method A, C or D
Water absorption	0,5	%	UNE-EN ISO 60, Method 1 (24h,23°C)
Calorific power (760 mm and 0°C)	1,255	KJ/Kg oC	–
Ignition temperature T _i	300	°C	ASTM-1929
Self-ignition temperature Tai	430	°C	ASTM-1929
Reaction to fire by radiation	M4	–	UNE-23-727
Flammability Test ⁽¹⁾	Class E	–	UNE-EN 13501-1:2007+A1:2010
Thermal			
Specific heat	0,35	KJ/Kg °C	–
Heat conductivity	4,5 x 10 ⁻⁴	cal cm /cm ² seg oC	DIN 52612
Heat transmission coefficient K 3 mm	5,5	Kcal/ m ² h °C	–
Softening temperature VICAT	>110	°C	UNE-EN ISO 306 Método A50
Temperature for buckling under load	98	°C	UNE-EN ISO 75-2/A
Recommended moulding temperature	150-170	°C	–
Maximum service temperature			IRPEN
Flat sheet	80-85	°C	
Moulded part	75-80	°C	
Linear dilation coefficient	7 x 10 ⁻⁵	K ⁻¹	ISO 11359-2
Dimensional variations at high temperature (contraction)	Max. 2,5	%	UNE-EN ISO 7823-1 Annex A
Mechanical			
Resistance to Charpy impact (test piece not notched)	min. 13	KJ/m ²	ISO 179/1
Rockwell hardness	100	Escala M	UNE-EN ISO 20392
Friction coefficient			IRPEN
PMMA/PMMA	0,8	°C	
PMMA/Steel	0,48-0,55	°C	
Optical			
Total Light transmission ⁽²⁾	min.90	%	ISO 143468-1
Turbidity	1	%	
Refractive index	1,49	–	
Acoustic			
Soundproofing			
4mm	24	dB	DIN 52210
6 mm	27	dB	
10 mm	29	dB	
20 mm	32	dB	
Electric			
Specific transversal resistance	min. 10 ¹⁵	Ω cm	DIN VDE 0303 P3
Dielectric strength Ed (1 mm test piece)	30	KV/mm	DIN VDE 0303 P2
Dielectric constant			DIN VDE 0302 P4
50 Hz	3,5	–	
10 ⁶ Hz	2,6	–	
Dielectric loss constant			DIN VDE 0303 P4
50 Hz	5x10 ⁻²	–	
10 ⁶ Hz	5x10 ⁻²	–	

(1) Clear material

(2) Clear material 3 mm

