

TRUPOLY AR Product Data



Property	Conditions	Method	Units - SI (US Customary)	Value (US Customary)
Density		ASTM D-1505	g/cm ³ (lb/ft ³)	1.2 (75)
Water Absorption	24 hr @ 73°F	ASTM D-570	%	0.15
Tensile Strength	10mm/min (0.4 in/min)	ASTM D-638	Mpa (psi)	60 (8,800)
Elongation at Break	10mm/min (0.4 in/min)	ASTM D-638	%	>90
Tensile Modulus of Elasticity	10mm/min (0.4 in/min)	ASTM D-638	Mpa (psi)	2,000 (290,000)
Abrasion (Taber Process)	100 Cycles, CS-10F Wheel, 500 g	ASTM D-1044	% Haze	<1.5
Layer Thickness			µm	7-15
VICAT Softening Temperature	Load: 1 kg (2.2lb)	ASTM D-1525	°C (°F)	150 (300)
Heat Deflection Temperature	Load: 1.82 Mpa (264 psi)	ASTM D-648	°C (°F)	130 (265)
Service Temperature Range			°C (°F)	-40 to 115 (-40 to 239)
Coefficient of Linear Thermal Expansion		ASTM D-696	10 ⁻⁵ /°C (10 ⁻⁵ /°F)	6.5 (3.6)
Thermal Conductivity		ASTM C-177	W/m ² K (Btu-in/ hr-ft ² -°F)	0.21 (1.46)
Specific Heat Capacity		ASTM C-351	kJ/kgK (Btu/lb°F)	1.26 (0.31)
Light Transmission	3mm (0.12 in) Clear Sheet	ASTM D-1003	%	89
Refractive Index	Clear Sheet	ASTM D-542		1.59
Specific Volume Resistance	Ketley	ASTM D-257	Ohm-cm	1.3 x 10 ¹⁷
Dielectric Strength	500 V/s	ASTM D-149	kV/mm (V/mil)	>30 (>770)

* Aside from abrasion parameters, tests and results apply to the carrier material only.

Chemical and Abrasion Resistance

The unique coating on TRUPOLY AR2's surface is the source for its chemical and abrasion resistance. This coating provides TRUPOLY AR2 with a chemical resistance durable to various materials ranging from corrosive elements and solvents to cleaning agents. Graffiti spray can easily be removed and the sheet is ideal for industrial environments where volatile chemicals are present. In addition, high abrasion resistance, when matched with mechanically superb polycarbonate, allows TRUPOLY AR2's designation to a variety of specialty applications.

Flammability

TRUPOLY AR2 has the properties required to pass the fire resistance tests required to meet many national fire codes. A sample result is presented below. For additional details, please check with your TRUPOLY AR2 distributor.

Standard	Classification*
BS 476/7	Class 1, Class 1Y
DIN 4102	B1, B-2
NSP 92501, 4, 5	M1, M2
CSE RF 2/75/A	Class 1
CSE RF 3/77	Class 1

*Depends on thickness

Mounting and Cleaning

TRUPOLY AR2 can be mounted into most existing frames made of PVC, aluminum or other metals. It is recommended to use neoprene or EPDM packing (never use soft PVC) in order to secure the sheet in its frame, rather than fixing with screws. Butyl rubber sealing strip or silicone sealant are also permissible. Any of the above materials, chemical substances or cleaning agents must explicitly receive the manufacturer's approval before using with or on TRUPOLY AR2.

TRUPOLY AR2 can easily be cleaned with a soft cloth made from 100% cotton using mild soap solution and rinsing with cold water. It is best to use mild dish cleaning soap. Commercial spray cleaners are also available. Please consult with your local Palram agent or representative for recommended commercial preparations available locally. Installation instructions and a list of compatible materials are available upon request.

Warranty

TRUPOLY AR2 features a 7-year manufacturer's limited warranty. See warranty for details.