

RPET

Recycled PET Sheet · Extruded

SUSTAINABILITY

rPET

Post-Consumer Recycled

CHARACTERISTICS · Post-consumer recycled PET substrate · High clarity & good light transmission · Excellent thermoformability · Plain smooth surface — printable both sides · Food-safe grades available on request	APPLICATIONS · Food & beverage packaging trays · Blister packs & clamshells · Retail & cosmetic packaging · Medical & pharma trays · Stationery & industrial packaging
COMPLIANCE RoHS · REACH SVHC · FDA & EU Food-Contact grades available on request · ISO 9001:2015	

TYPICAL PROPERTIES

All values are typical · ASTM test methods · sheet specimens unless noted

PROPERTY	TEST METHOD	VALUE	UNIT	PROPERTY	TEST METHOD	VALUE	UNIT
MECHANICAL				THERMAL			
Tensile Str. @ Yield	ASTM D638	≥ 44.1	MPa	Melting Temperature	ASTM E794	250 ± 5	°C
Tensile Str. @ Break	ASTM D638	≥ 58.8	MPa	Glass Transition Temp.	ASTM D3418	65 - 75	°C
Tensile Modulus	ASTM D638	≥ 1471	MPa	Thermoforming Temp.	—	120 - 160	°C
Elongation @ Break	ASTM D638	≥ 300	%	FLAMMABILITY			
OPTICAL				UL 94 @ 1.6 mm	UL 94	HB	—
Light Transmittance	ASTM D1003	88 - 91	%	PROCESSING			
Haze	ASTM D1003	0.8 - 3.0	%	Pre-drying Temp.	—	60 - 80	°C
PHYSICAL				Pre-drying Time	—	4	hours
Specific Gravity	ASTM D792	1.35	g/cm³	Forming Temperature	—	120 - 160	°C
Thickness Tolerance	—	± 0.015	mm	Mould Temperature	—	On request	
Coeff. Kinetic Friction	GB/T 10006	≤ 0.35	—				

NOTES

Source: Desu Plastic Technology (Shanghai), May 2026.
Tensile/Elongation on sheet specimens per ASTM D638.
Values converted: 1 kgf/cm² = 0.0981 MPa.
RPET may show slight surface variance vs virgin APET — inherent characteristic of recycled feedstock.
RoHS verified. FDA & EU food-contact on request.
Values typical. Validate for application.

PERFORMANCE PROFILE

≥ 300%
Elongation @ break

88-91%
Light transmittance

1.35g/cm³
Specific gravity

HBUL 94
Standard burn @ 1.6 mm

Recycled PET — thermoformability and clarity with sustainability credentials.

PRODUCTION SPECIFICATIONS			
Sheet Thickness	0.18 - 0.80 mm	Roll/sheet gauge	 T05 Plain Smooth
Sheet Width	up to 1400 mm	Standard line capacity	
Thickness Tolerance	± 0.015 mm	Multi-point validated	
Layer Structure	Mono / ABA	Co-extrusion option available	
Surface	T05 Plain Smooth	Gloss/Gloss — both sides	
Colour	Any colour or Clear	 + custom Pantone/RAL match	

HOW TO READ THESE NUMBERS • Tensile Strength Force before yield (permanent stretch) or fracture. • Tensile Modulus Stiffness. Higher = more rigid under load. • Elongation @ Break Stretch before snap. Higher = tougher material. • Light Transmittance % of light passing through. Higher = clearer. • Haze % scattered light. Lower = better optical clarity.	• Specific Gravity Density vs water. 1.35 = slightly denser than water. • Glass Transition (Tg) Below Tg: rigid. Above Tg: begins to soften. • Thermoforming Temp. Sheet forming window for vacuum / pressure forming. • UL 94 HB Horizontal burn — slow, controlled. Standard for PET. • Thickness Tolerance ± 0.015 mm — tight gauge for consistent forming.
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