



PE-RM-UV

UV-Stabilised Polyethylene for Rotomoulding

PRELIMINARY ENGINEERING DATA

DOCUMENT ID JPI-TDS-PE-RM-UV
ISSUE DATE 2026-07-22

OWNER TECHNICAL & R&D
STATUS CONTROLLED DEVELOPMENT DATA

PRODUCT OVERVIEW

A medium-density rotomoulding compound/powder platform targeting balanced flow, ESCR, low-temperature impact and outdoor durability. Applications: Water and chemical tanks; Agricultural containers; Outdoor industrial products. Key features: 35-mesh powder option; High ESCR target; UV8/UV20 variants after validation.

PRELIMINARY TECHNICAL PROPERTIES

PROPERTY / CONDITION	TEST METHOD	PROVISIONAL VALUE	UNIT
Melt flow rate, 190°C/2.16 kg	ISO 1133-1	3.2-4.0	g/10 min
Density, 23°C	ISO 1183-1	0.938-0.941	g/cm³
ESCR, F50, 100% Igepal, Condition A	ASTM D1693	≥ 1,000	h
Tensile stress at yield, 23°C	ISO 527-2	≥ 18	MPa
Flexural modulus, 23°C	ISO 178	750-900	MPa
Tensile elongation at break	ISO 527-2	≥ 400	%
Powder particle-size distribution	Validated sieve method	≥ 95% passing 500 µm; fines limit TBD	
Dry flow / bulk density	ASTM D1895 or validated internal method	To be established	
Low-temperature impact / full-part drop	ASTM D1998/customer part method	To be established	
UV-weathering retention	ASTM G155 or ISO 4892-2	To be established	

QUALIFICATION & USE

- Values are development targets, not a sales specification or certificate of analysis.
- Final limits require independent production-lot validation using the cited methods and controlled specimen preparation.
- Regulatory, food-contact, medical, UL, IEC, ATEX or OEM compliance applies only when confirmed in a grade-specific document.