



TPO-E20UV

Automotive Exterior TPO – 20% Mineral, UV  
Stabilised

PRELIMINARY ENGINEERING DATA

DOCUMENT ID JPI-TDS-TPO-E20UV  
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OWNER TECHNICAL & R&D  
STATUS CONTROLLED DEVELOPMENT DATA

PRODUCT OVERVIEW

UV-stabilised, impact-modified mineral-filled TPO for non-safety exterior trim and durable appearance studies. Applications: Bumper trim; Wheel-arch cladding; Exterior covers and guards. Key features: High impact target; UV-stabilised formulation; Paintable option subject to validation.

PRELIMINARY TECHNICAL PROPERTIES

| PROPERTY / CONDITION                            | TEST METHOD                                    | PROVISIONAL VALUE | UNIT     |
|-------------------------------------------------|------------------------------------------------|-------------------|----------|
| Inorganic residue (mineral-correlated)          | ISO 3451-1; validated formulation mass balance | 20 ± 2            | wt. %    |
| Melt flow rate, 230°C/2.16 kg                   | ISO 1133-1                                     | 16-22             | g/10 min |
| Density, 23°C                                   | ISO 1183-1                                     | 1.04-1.07         | g/cm³    |
| Flexural modulus, 23°C                          | ISO 178                                        | 1,300-1,800       | MPa      |
| Notched Izod impact, 23°C                       | ASTM D256                                      | 350-500           | J/m      |
| Low-temperature impact                          | Named OEM/customer method                      | To be established |          |
| Xenon-arc weathering and colour/gloss retention | ISO 4892-2 or named OEM method                 | To be established |          |
| Paint adhesion / thermal cycling                | Named coating/OEM method                       | 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.