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Lightweight Reinforced Thermoplastic (LWRT)

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Lightweight Reinforced Thermoplastic (LWRT)

Description:

Lightweight Reinforced Thermoplastic (LWRT) is a glass fiber composite material widely used in the automotive industry. Composed of glass fiber and polypropylene in a 50:50 mass ratio, it is produced through wrapping, combing, web formation, needle punching, and hot pressing. As a GMT material, LWRT combines low cost with high performance, offering lightweight properties, excellent impact resistance, and environmental friendliness for various automotive applications. (68 words)

Features:

LWRT features a low density (0.9-1.2 g/cm³) for lightweight performance, high bending strength (50-150 MPa), and excellent impact strength (20-50 kJ/m²). It offers 100% recyclability, flame retardancy, and durability with resistance to aging. With a molding thickness of 1-10 mm and hot pressing at 180-220 °C, LWRT ensures high moldability, no formaldehyde, and suitability for complex automotive parts like roof linings and trunk covers. (66 words)



Advantages:

LWRT provides significant benefits: over 45% lighter than traditional materials, reducing vehicle weight; excellent impact resistance (20-50 kJ/m²) for durability; environmentally friendly with 100% recyclability and no harmful emissions; superior sound insulation for enhanced comfort; and cost-effective production. Its flame retardancy and long service life minimize fire risks and replacement needs, making it ideal for automotive components like underbody shields and interior parts. (67 words)

Common Parameters

