INEOS STYROLUTION

# StyLight Aesthetic S G290-1

StyLight Thermoplastic Composite

TECHNICAL DATASHEET

## DESCRIPTION

StyLight Aesthetic S G-290-1 is a thermoplastic composite based on modified SAN matrix optimized for semi structural aesthetic applications. StyLight is our innovative thermoplastic composite based on styrenic copolymers for lightweight design. This combination of structural stiffness, aesthetics, processability and dimensional stability makes StyLight an excellent solution for high performance applications.

## FEATURES

- Excellent mechanical performance
- Very high dimensional stability
- High surface quality
- Very good processing
- High impact strength
- Low moisture uptake

## APPLICATIONS

- Seat structures
- Interior trims
- Orthoses
- Bicycle seats
- Back covers for electronics
- Drones

| Property, Test Condition | Standard | Unit | Values |
|---|---|---|---|
| **Mechanical Properties** | | | |
| Tensile Modulus, 0° fiber direction, 23°C | ISO 527-4 | GPa | 23.9 |
| Tensile Strength, 0° fiber direction, 23°C | ISO 527-4 | MPa | 430 |
| Tensile Elongation, 0° fiber direction, 23°C | ISO 527-4 | % | 2.6 |
| Flexural Modulus, 0° fiber direction, 23°C | ISO 14125 | GPa | 22 |
| Flexural Strength, 0° fiber direction, 23°C | ISO 14125 | MPa | 620 |
| **Thermal Properties** | | | |
| Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa) | ISO 75 | °C | 108 |
| Glass transition temperature | ISO 75 | °C | 110 |
| **Other Properties** | | | |
| Density | ISO 1183 | kg/m³ | 1750 |
| Moisture Absorption, Equilibrium 23 °C/50% RH | ISO 62 | % | 0.08 |
| TVOC | VDA 277 | ppm | 41 |
| **Processing** | | | |
| Mold Temperature Range | ISO 294 | °C | 90 - 100 |
| Sheet Temperature Range before Mold Closing | - | °C | 180 - 200 |

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| Property, Test Condition | Standard | Unit | Values |
|---|---|---|---|
| Consolidation Pressure | - | MPa | 1 - 2 |
| **Material Description** | | | |
| Area weight | - | g/m² | 440 |
| Thickness per layer | - | mm | 0.25 |

Typical values for uncolored products

## DISCLAIMER

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