

## Technical Information


**TRINSEO**™

# ENLITE™ LGF 2501 + MAGNUM 3416SC @ 40% Glass Loading Structural Polymer

## Overview

This LGF40 ABS Alloy system is developed for light weight semi-structural applications which require very high stiffness especially at elevated temperatures. This system is suitable for structural components with high demands on dimensional stability and good chemical resistance

| Physical                                                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--------------------------------------------------------------------|-------------------------|--------------------|-------------|
| Density                                                            | 1.42 g/cm³              | 1.42 g/cm³         | ISO 1183    |
| Mechanical                                                         | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Modulus                                                    | 1.81E+6 psi             | 12500 MPa          | ISO 527-1/1 |
| Tensile Stress (Break)                                             | 23900 psi               | 165 MPa            | ISO 527-2/5 |
| Tensile Strain (Break)                                             | 1.8 %                   | 1.8 %              | ISO 527-2/5 |
| Flexural Modulus                                                   | 1.60E+6 psi             | 11000 MPa          | ISO 178     |
| Flexural Stress                                                    | 36300 psi               | 250 MPa            | ISO 178     |
| Impact                                                             | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Charpy Notched Impact Strength (73°F (23°C))                       | 12 ft-lb/in²            | 25 kJ/m²           | ISO 179/1eA |
| Charpy Unnotched Impact Strength<br>73°F (23°C)                    | 21 ft-lb/in²            | 45 kJ/m²           | ISO 179/1eU |
| Thermal                                                            | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load<br>264 psi (1.8 MPa), Unannealed | 392 °F                  | 200 °C             | ISO 75-2/A  |
| Vicat Softening Temperature                                        | 374 °F                  | 190 °C             | ISO 306/B50 |

## Additional Information

These are typical properties as measured on injection molded specimens ('dogbones') defined by ISO 3167 type 1a (L= 175 mm, center-section: 80x10x4 mm).

## Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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