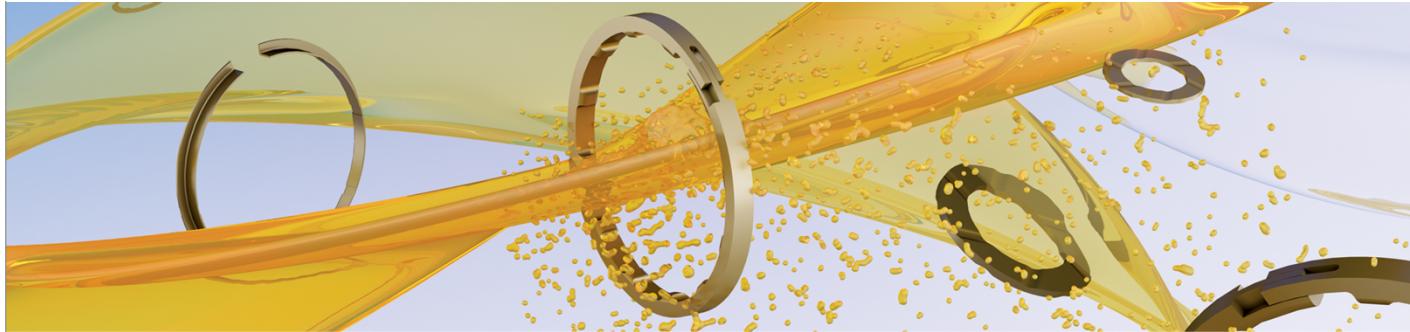


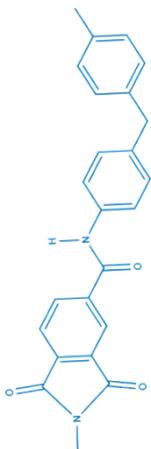
# PAI GLon™ XA55\* Technical Datasheet



PAI GLon™ XA55 is a polyamide-imide (PAI) resin reinforced with glass fibers, developed to deliver superior strength, high stiffness, and excellent creep resistance.

Among thermoplastics, PAI GLon™ stands out for maintaining exceptional strength and rigidity at continuous temperatures up to 275 °C (525 °F).

This material also resists wear, creep, and a broad range of chemicals. With its robust mechanical profile, PAI GLon™ XA55 is an ideal choice for metal replacement in high-temperature, high-load applications.



| Physical Properties               | Typical Value | Unit    | Test method                 |
|-----------------------------------|---------------|---------|-----------------------------|
| Density / Specific Gravity        | 1,53          | g/cm³   | DIN EN ISO 1183-1           |
| Water Absorption (24 h)           | 0,25          | %       | DIN EN ISO 62               |
| Hardness (Shore D)                | 86            | Shore-D | DIN ISO 48-4                |
| Hardness (Brinell)                | 250           | N/mm²   | DIN EN ISO 2039-1           |
| Mechanical Properties             | Typical Value | Unit    | Test method                 |
| Tensile Modulus                   | 9580          | MPa     | DIN EN ISO 527-2            |
| Tensile Stress                    | 151           | MPa     | DIN EN ISO 527-2            |
| Tensile Elongation                | 2,3           | %       | DIN EN ISO 527-2            |
| Flexural Modulus<br>23°C          | 8980          | MPa     | DIN EN ISO 178              |
| Flexural Strength<br>23°C         | 234           | MPa     | DIN EN ISO 178              |
| Compressive Modulus               | 9080          | MPa     | DIN EN ISO 604              |
| Compressive Strength              | 230           | MPa     | DIN EN ISO 604              |
| Impact                            | Typical Value | Unit    | Test method                 |
| Notched Izod 23°C                 | 7,7           |         | DIN EN ISO 179-1/1eA        |
| Notched Izod -25°C                | 7,5           | kJ/m²   | DIN EN ISO 179-1/1eA        |
| Unnotched Izod 23°C               | 33,5          | m²      | DIN EN ISO 179-1/1eU        |
| Unnotched Izod -25°C              | 37,3          |         | DIN EN ISO 179-1/1eU        |
| Thermal Properties                | Typical Value | Unit    | Test method                 |
| Heat Deflection Temperature (HDT) | 284           | °C      | DIN EN ISO 75-2<br>1,80 MPa |
| Vicat Softening Temperature       | 282           | °C      | DIN EN ISO 306              |

Typical properties: Mentioned values are not to be construed as specifications. Properties of final parts may differ due to shape and process related variations. \*PAI GLon™ XA55 is a trademark of GAPI Technische Produkte GmbH and based on Torlon® (PAI). Torlon is a registered trademark of Syensqo Specialty Polymers.

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