

Adiprene® LFP 2950A

Polyurethane (Polycaprolactone, PPDI)

Chemtura

Message:

ADIPRENE LFP 2950A is a PPDI-terminated polycaprolactone prepolymer having very low free PPDI content (typical < 0.1%) for easier management of health and safety during handling. This prepolymer is similar to ADIPRENE PP 1096H in composition and performance. ADIPRENE LFP 2950A yields high performance 93-96 Shore A hardness elastomers when cured with VIBRACURE® A 250 or HQEE.

The high performance features of ADIPRENE LFP 2950A are due to PPDI (p-phenylene diisocyanate), a special building block that imparts exceptional properties to cast polyurethane elastomers. The unique combination of properties exhibited by PPDI-based prepolymers is superior to those available from standard prepolymers based on TDI or MDI.

Features of ADIPRENE LFP 2950A include:

- Low Free PPDI Content
- Low Viscosity and Easy Melting
- Long Pour Life
- Excellent Dynamics
- Good Tensile/Tear Strength
- Excellent Resilience

| General Information | | | |
|------------------------------|-----------------------|-------------------|-------------|
| Features | Good Tear Strength | | |
| | High Tensile Strength | | |
| | Low Viscosity | | |
| | Resilient | | |
| Processing Method | Casting | | |
| Physical | Nominal Value | Unit | Test Method |
| Specific Gravity | 1.15 | g/cm ³ | ASTM D792 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness (Shore A) | 94 to 96 | | ASTM D2240 |
| Mechanical | Nominal Value | Unit | Test Method |
| Compressive Strength | | | ASTM D695 |
| 5% Strain | 2.76 | MPa | |
| 10% Strain | 5.52 | MPa | |
| 15% Strain | 8.27 | MPa | |
| 20% Strain | 11.7 | MPa | |
| 25% Strain | 15.2 | MPa | |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Stress | | | ASTM D412 |
| 100% Strain | 10.3 | MPa | |
| 300% Strain | 13.8 | MPa | |
| Tensile Strength | 44.8 | MPa | ASTM D412 |
| Tensile Elongation (Break) | 580 | % | ASTM D412 |
| Tear Strength (Split) | 25 | kN/m | ASTM D470 |
| Compression Set | | | ASTM D395B |

| 70°C, 22 hr | 45 | % | |
|-------------------------|---------------|-----------------------|------------|
| 100°C, 22 hr | 60 | % | |
| Bayshore Resilience | 62 | % | ASTM D2632 |
| Thermoset | Nominal Value | Unit | |
| Pot Life | 9.0 | min | |
| Demold Time | > 60 | min | |
| Post Cure Time (127°C) | 16 | hr | |
| Additional Information | Nominal Value | Unit | |
| Dynamic Properties | | | |
| Storage Modulus : 30°C | 3.20E+8 | dynes/cm ² | |
| Storage Modulus : 150°C | 2.10E+8 | dynes/cm ² | |
| Tangent Delta : 30°C | 0.0150 | | |
| Tangent Delta : 150°C | 0.0130 | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

