

Adiprene® LFP 1950A

Polyurethane (Polyester, PPDI)

Chemtura

Message:

ADIPRENE LFP 1950A is a PPDI-terminated polyester 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 1095H in composition and performance, while offering significant processing advantages including easier melting, lower viscosity, and increased pour life. ADIPRENE LFP 1950A yields a high performance 93-95 Shore A hardness elastomer when cured with VIBRACURE® A 250.

The high performance features of ADIPRENE LFP 1950A 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 1950A include:

- Low Free PPDI Content
- Lower Viscosity and Easier Melting
- Increased Pour Life
- Excellent Dynamics
- Excellent 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	1.19	g/cm ³	ASTM D792
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	93 to 95		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Compressive Strength			ASTM D695
5% Strain	2.48	MPa	
10% Strain	4.83	MPa	
15% Strain	6.89	MPa	
20% Strain	9.31	MPa	
25% Strain	12.1	MPa	
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
100% Strain	9.65	MPa	
300% Strain	13.8	MPa	
Tensile Strength	48.3	MPa	ASTM D412
Tensile Elongation (Break)	650	%	ASTM D412
Tear Strength (Split)	28	kN/m	ASTM D470

Compression Set			ASTM D395B
70°C, 22 hr	35	%	
100°C, 22 hr	50	%	
Bayshore Resilience	57	%	ASTM D2632
Thermoset	Nominal Value	Unit	
Pot Life	6.0	min	
Demold Time	> 60	min	
Post Cure Time (116°C)	16	hr	
Additional Information	Nominal Value	Unit	
Dynamic Properties			
Storage Modulus : 30°C	3.14E+8	dynes/cm ²	
Storage Modulus : 150°C	2.42E+8	dynes/cm ²	
Tangent Delta : 30°C	0.0180		
Tangent Delta : 150°C	0.0140		

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

