

Technical Data

Product Description

Liquid Silicone Rubber materials for device and component fabrication in the healthcare industry.

APPLICATIONS

Dow Corning® QP1-2XX Liquid Silicone Rubbers (LSRs) are platinum-catalyzed, heat-cured materials designed for the fabrication of medical devices and device components and for short term applications.

DESCRIPTION

Dow Corning QP1-2XX LSRs are a series of two-part platinum-catalyzed silicone elastomers specifically designed for liquid injection molding. Each elastomer is supplied in a two-part kit (Part A and Part B), equal portions (by weight) of which must be thoroughly blended together prior to use. The elastomer is thermally cured via an addition-cure (platinum-catalyzed) reaction. When blended and cured as indicated, the resulting elastomer consists of cross-linked dimethyl and methyl-vinyl siloxane copolymers and reinforcing silica.

The Dow Corning QP1-2XX LSRs are available in a range of nominal hardness from 30 to 70, Durometer-Shore A. The elastomers can be used without any post cure; although, if necessary, this may be employed to stabilize the final properties. Furthermore, the cured elastomers are heat stable up to 204°C (400°F), can be autoclaved, and exhibit high gas permeability compared with most thermoset elastomers and thermoplastics.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
Search for UL Yellow Card	• Dow Corning Corporation • Dow Corning®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Autoclavable • Fast Cure • Fast Molding Cycle • Food Contact Acceptable • Good Colorability • Good Processability • High Gas Permeability • Low Viscosity • Non-Blooming
Uses	• Medical/Healthcare Applications
Agency Ratings	• USP Class VI
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.12	1.12 g/cm ³	ASTM D792
Viscosity ³			
Part A	167 Pa·s	167 Pa·s	
Part B	152 Pa·s	152 Pa·s	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (100% Strain)	305 psi	2.10 MPa	ASTM D412
Tensile Strength	1200 psi	8.30 MPa	ASTM D412
Tensile Elongation (Break)	500 %	500 %	ASTM D412
Tear Strength ⁴	271 lbf/in	47.4 kN/m	ASTM D624
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A)	51	51	ASTM D2240

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 10/s

⁴ Die B

