

S71U

Translucent platinum-cured silicone rubber

Description

S71U is a high transparency grade of silicone rubber intended for use in food, dairy, brewing, potable water, pharmaceutical and biomedical applications. Platinum-cured silicone is odourless, tasteless and non toxic. Seals made from S71U are resistant to repeated sterilising, autoclaving and cleaning agents commonly used in these industries.

Unlike traditional peroxide-cure methods, platinum curing results in a smooth contact surface finish and a high degree of purity. No residue substances such as benzoic acid, peroxides, ketones are produced during manufacturing, which can be transferred from the seal to critical hygienic products.

Key Attributes

- ▶ Compliant with FDA CFR210177.2600 for use with dry, aqueous and fatty food stuffs.
- ▶ Conforms to USP class VI suffix 87 and 88, Biological Reactivity tests.
- ▶ Good mechanical and physical properties
- ▶ Chemically stable over a temperature range of -60°C to +200°C.
- ▶ Withstands sterilizing and autoclaving procedures
- ▶ Free from Animal Derived Ingredients (ADI)

Typical Applications

- ▶ Food processing and packaging equipment
- ▶ Pharmaceutical and biomedical apparatus
- ▶ Hygienic seals in dairy equipment
- ▶ Potable and high-purity water applications

Other materials in the range

S80U Platinum-cured Translucent Silicone
 S65T Peroxide-cured Translucent Silicone
 S75T Peroxide-cured Translucent Silicone
 S80T Peroxide-cured Translucent Silicone



Typical Material Properties

Property	ASTM	ISO	Value
Material Type	VMQ	VMQ	
Colour			Translucent
Hardness: (°IRHD)	D1415	ISO48	70-75
Tensile Strength (MPa)	D412	ISO37	8.5
Elongation at break (%)	D412	ISO37	480
Compression Set: 22 hrs @ 175°C (347°F)	D395	ISO815	32.2%
Minimum Operating Temperature			-60°C (-76°F)
Maximum Operating Temperature			+200°C (+392°F)
Heat Ageing: 168 hrs @200°C (392°F)			
Hardness change (points)	D1415	ISO48	5 RHD
Tensile strength change	D412	ISO37	+10%
Elongation at break change	D412	ISO37	-1.5%

SPECIAL NOTE: This information is to the best of our knowledge accurate and reliable. However, PPE Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended. In non-black grades of elastomer, it is possible to observe slight variations in colour. This is normal and is inherent in the part; it is not indicative of foreign matter. These colour variations are not expected to adversely effect the performance of the part. The material properties above should not to be used for specification purposes.



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