Nanofluor® Y75N

Fluoroelastomer

Precision Polymer Engineering Ltd.

Message:

A translucent brown fluoropolymer compound reinforced with semi- crystalline perfluoropolymer nano-particles, specially developed to meet the demands of the semiconductor industry.
Nanofluor® Y75N combines a fully fluorinated nano-filler system which significantly reduces gas permeability. The absence of metallic or carbon-based fillers produces an exceptionally pure, translucent elastomer that is less prone to chemical attack with the benefit of reduced swelling following exposure to aggressive media.
Nanofluor® Y75N is a truly novel material which bridges the gap between fluorocarbons (FKM) and perfluoroelastomers (FFKM). Its high fluorine content provides unrivalled purity, excellent high temperature capability and very good chemical resistance. Nanofluor® Y75N is a cost effective upgrade from FKM and fluorosilicone in many semiconductor applications.
Key Attributes
Good all round chemical and temperature resistance.
Outstanding mechanical properties.
Exceptional oxygen plasma resistance.
Exceptionally pure - does not contain any inorganic fillers or metal oxides which cause particulation problems.
Extremely low permeability and out-gassing properties making it ideal for vacuum sealing applications.
High sealing conformity reduces surface permeation.
Typical Applications
Designed for use in semiconductor applications, including:
NW and KF flange fittings
Dry plasma etch
Wet etch (acid based)
Dry ashing
Oxidation/diffusion
Lithography
Static seals: O-rings, body seals, cathode seals
Gaskets

General Information	
Features	The degassing effect is low to no High purity Good thermal shock resistance Good chemical resistance
Uses	Washer Seals Accessories lithography
Appearance	Translucent Brown

Hardness	Nominal Value	Test Method
Durometer Hardness (Shore A)	68	ASTM D2240, ISO 7619
IRHD Hardness	67	ASTM D1415, ISO 48

Elastomers	Nominal Value	Unit	Test Method

Tensile Stress (100% Strain)	3.50	MPa	ASTM D412, ISO 37
Tensile Strength (Yield)	17.0	MPa	ASTM D412, ISO 37
Tensile Elongation (Break)	360	%	ASTM D412, ISO 37
Compression Set			ASTM D395, ISO 815
200°C, 24 hr	15	%	ASTM D395, ISO 815
204°C, 70 hr	25	%	ASTM D395, ISO 815
Thermal	**Nominal Value**	**Unit**	
Maximum Operating Temperature			
Continuous	180	°C	
Short Term	225	°C	
Additional Information			
Minimum Operating Temperature: -20°C (-4°F)			

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