



# Nanofluor™

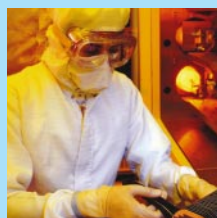
## Translucent Fluoropolymer

A translucent fluoropolymer reinforced with crystalline nanoparticles of fluoropolymer and containing no inorganic fillers or metal oxides.

The product exhibits high purity with low permeability, high temperature capability and very good chemical resistance.

### Key Features and Benefits

- Mechanical properties: Excellent
- Chemical resistance: Very good
- Temperature capability: -20°C – +225°C
- Oxygen plasma resistance: Excellent
- Steam resistance: Excellent
- Colour: Translucent
- High purity = ultra-low contamination
- Low permeability
- Low out-gassing properties
- Ideal for vacuum applications



### Materials Comparison

Test	Nanofluor™ Y75N	Perlast® G74P	Perlast® G70S	Perlast® G70T
Hardness	73 IRHD	75 IRHD	70 IRHD	70 IRHD
Tensile Strength	16.0 MPa	10.2 MPa	16.1 MPa	17.4 MPa
Elongation	420%	460%	155%	144%

### Chemical Compatibility

Media	Nanofluor™ Y75N
Oxygen	Excellent
Ozone	Excellent
Alcohol	Good
Benzene	Good
Acids	Excellent
Alkalis	Fair
Water	Excellent

### Helium Leak / Permeation Testing

Material type	Time to 1E-10 mbarl/s	Time to 1E-9 mbarl/s	Leak rate at 120 seconds (E-12)
Typical Silicone	20	23	200,000
Typical Perfluoroelastomer	127	157	63
Nanofluor™	213	262	5

- Aerospace
- ✓ Chemical Processing
- Diesel
- Food
- Oil & Gas
- ✓ Pharmaceutical
- ✓ Semiconductor

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# Y75N