

NITOFLOX
No.900UL**Outline**

NITOFLOX NO.900UL is a polytetrafluoroethylene (PTFE) film with a number of excellent features such as heat resistance, chemical resistance, desirable electrical properties, low friction coefficient and non-adhesiveness.

Structure



Fig. 1

Features

- Superior chemical resistance; hardly affected by acids such as nitric acid, sulfuric acid, hydrochloric acid and phosphoric acid as well as alkalis including caustic alkali and ammonia.
- Excellent electrical properties such as little dielectric loss, high insulation resistance and breakdown voltage. Both dielectric constant and dielectric loss tangent are minimal while its volume resistance is extremely high that remain stable in a wide range of temperatures and frequencies, so it can be used as a high-frequency insulating material.
- Continuous use in a wide range of temperature from -100° C to 260° C available.
- Lowest friction coefficient among all solid materials and excellent self-lubricating ability. In combination with fillers, it makes an auto-lubrication bearing with great friction resistance and cold-flow resistance.
- With its non-adhesiveness and mold-releasing property, no adhesive substance attaches to it, and makes mold-releasing easy when it comes into contact with adhesive substance.
- Excellent weather resistance and moisture resistance.
- Superior flame resistance.

1/2

NO.900UL_08E

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General Properties

Table 1

Property		Unit	Characteristic value							
Thickness		mm	0.05	0.08	0.10	0.13	0.18	0.3	0.5	1.0
Tensile strength		MPa	50	50	50	50	50	50	45	40
Elongation		%	300	300	310	320	330	330	370	400
Breakdown Voltage	Average value	kV	6.0	6.3	9.6	11.6	14.1	19.5	26.7	37.7
Dielectric constant (1MHz)		—	2.1							
Volume resistance		$\Omega \cdot \text{cm}$	over 1×10^{17}							
Arc resistance		sec	over 180							
Water absorption rate		%	0							
Heat resistance		%	0							
Chemical resistance	HNO ³ (60%)	%	0							
	NaOH (40%)	%	0							
	Acetone	%	0							
Specific gravity		—	2.1~2.3							
Coefficient of kinetic friction		—	0.1							
Flame resistance		—	UL94 (E52859) VTM-0(0.02~0.24mmt)/V-0(over 0.25mm)							
Melting point		°C	327							

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