NITOFLON™

No.900UL

Outline

NITOFLON™ No.900UL is a product made from polytetrafluoroethylene (PTFE) film. It has many excellent properties such as heat resistance, electrical insulation, low friction, and chemical resistance.

Structure

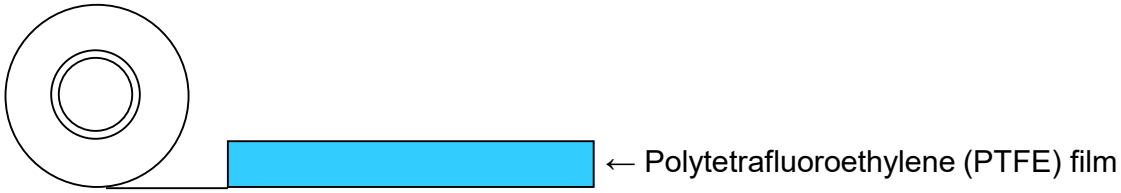

Fig.1 Structure

Features

- Available in wide range of thickness lineups from 0.03mm to 1.5mm.
- It has excellent chemical resistance. It resists to the most acids, alkalis, and organic solvents.
- It has excellent electrical properties such as high dielectric breakdown voltage and low dielectric loss.
- Continuous use is possible in a wide temperature range of from -100℃ to 260℃ (recommended value), and even it can be used at higher temperatures for short periods of time.
- It has the lowest coefficient of friction among solid materials.
- It prevents sticking substances to stick and can be easily removed even after contacting it.
- Almost no characteristic deterioration due to hygroscopicity or ultraviolet rays.
- Certified under UL94 standards for flame retardant (V-0 or VTM-0 registration number E52859).

Applications

- Mold release of plastic molding
- Mold release for semiconductor chip resin encapsulation
- Release of ACF crimp
- Heat-resistant insulation for coils of motors and transformers

Properties

Table 1 General properties

Property		Unit	Characteristic value								
Thickness		mm	0.03	0.05	0.08	0.10	0.13	0.18	0.3	0.5	1.0
Tensile strength		MPa	47	50	50	50	50	50	50	45	40
Elongation		%	300	300	300	310	320	330	330	370	400
Breakdown Voltage		kV	4.2	6.0	6.3	9.6	11.6	14.1	19.5	26.7	37.7
Dielectric constant (1MHz)		－	2.1								
Volume resistance		Ω･cm	over 1×10^{17}								
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)								

Notes

- When disposing of this product, please dispose of it according to the local regulations. When incinerating it, please use an appropriate disposal equipment otherwise harmful fluorine gas would be generated.
- Do not heat it above 400°C as fluorine gas may be generated.
- This product is for industrial use. Please do not use it on the human body.
- Store in a cool place away from direct sunlight.