



Thermoflon

NEO-PASCAL

High-performance fluoroelastomer tube

Thermoflon [Neo Pascal]

<Applications/fields> Physical and chemical equipment, analytical equipment, chemical industry, general

(Pascal's high-grade type. A tube that pursues more functionality.)

- **Excellent in continuous bending.**

Continuous bending performance, which has been a drawback of Pascal, has been improved.

- **Chemical resistance is excellent**

The inner layer is made of tetrafluoride resin. It's resistant to most chemicals.

- **Little permeation of chemicals and water.**

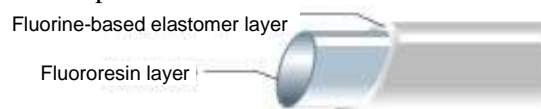
Due to the special multi-layer structure, it has excellent barrier properties while maintaining flexibility.

- **Less pollution due to elution.**

There is almost no risk of elution because it contains no cross-linking agent, stabilizer or plasticizer.

- **It is a semi-transparent tube.**

It transparent enough to see the liquid.



Standard size (mm)

Inner diameter	Outer diameter
2.0	3.0
2.0	4.0
3.0	5.0
4.0	6.0
6.0	8.0



High-performance fluoroelastomer tube

Thermoflon [Neo Pascal]

■General properties of thermoflon

Item	Thermoflon	General vulcanized fluoro rubber
specific gravity	1.89	1.8~2.1
Hardness JISA	67	55-90
Melting point °C	220	-
Thermal decomposition start temperature °C	380	400以上
Thermal conductivity cal/cm · sec · °C	3.6x10 ⁻⁴	6.0x10 ⁻⁴
specific heat cal/g · °C	0.3	0.3
Low temperature torsion test T ₅₀ °C	-9	-20~-8
Elongation %	620	600~150
Tensile strength Mpa	15	7~22
Tear strength kN/m	28	17~25
Compression set 50°C×24h %	57	5~27
Coefficient of friction	0.6	0.6~0.7
Impact resilience %	10	10~15
Volume resistivity Ω·cm	5x10 ¹³	1x10 ¹³
Dielectric breakdown voltage kV/0.15m	16	9.3
Dielectric constan 23°C 10 ³ Hz	59	13.8

■Chemical resistance

		thermo flon basic	thermo flon Advance	thermo flon Pascal	thermo flon neo pascal
Acid	Hydrochloric acid (35%)	○	○	○	○
	Concentrated sulfuric acid (98%)	○	○	○	○
	Concentrated nitric acid (70)	○	○	○	○
	phosphoric acid (85)	○	○	○	○
alkali	Sodium hydroxide(30%)	○	○	○	○
	Sodium hypochlorite	○	○	○	○
hydrocarbon (Aliphatic)	Hexane	○	○	○	○
	Cyclohexane	○	○	○	○
Aromatic	toluene	○	○	○	○
	Xylene	○	○	○	○
	methanol	○	○	○	○
alcohol	ethanol	○	○	○	○
	Isopropyl alcohol	○	○	○	○
ether	Diethyl ether	△	●	○	○
	Tetrahydrofuran	×	×	●	●
	acetone	×	×	●	○
Ketone	Methyl ethyl ketone	×	×	●	○
carboxylic acid	Acetic acid (99%)	△	●	○	○
ester	Ethyl acetate	×	×	●	○
	Proprietary glycol monomethyl etherate	×	△	○	○
	γ-butyrolactone	△	○	○	○
Chlorine solvent	Methylene chloride	●	●	○	○
	1,2-dichloroethane	○	○	○	○
	Trichlorethylene	●	○	○	○
	Tetrachlorethylene	○	○	○	○
Amide	Dimethylformamide	×	×	●	○
	Methyl pyrrolidone	×	×	○	○
Other	Dimethyl sulfoxide	△	○	○	○
	ASTM D1996 gasoline	○	○	○	○
	gasoline	(*1)	(*1)	○	○

Bending test (company test)
Neo-Pascal 3.0mm x 5.0mm
Continuous reciprocating test with a bending tester.
[Result]
After 90 days (approximately 3.85 million cycles), there were no cracks or breaks.



◆ Test method: Measure the weight change after soaking in each chemical for 7 days at room temperature.

*Evaluation (weight increase rate)

- Less than 5%
- Above 5% and less than 10%
- △ Above 10% and less than 20%
- × More than 20% or not recommended

(*1) Weight gain is excellent, but the color changes to reddish brown

■ Relative Comparison of Thermoflon Series

Series name	Product Name	Color tone	Recommended to use maximum temperature (°C)	Comparison of key features (best with 6 stars. based on the basic).			Food Safety (Ministry of Health and Welfare announcement))
				Flexibility	Barrier	Pressure resistance	
Thermoflon	basic	transparent	120	☆☆☆☆☆☆	☆☆☆	☆☆	Suitable for (No. 370)
	advanced	transparent	120	☆☆☆☆☆☆	☆☆☆☆	☆☆☆	Suitable for (No. 370)
	Pascal	transparent	120	☆☆☆	☆☆☆☆☆☆	☆☆☆☆☆☆	Suitable for (No. 370))
	Neo-Pascal	translucent	120	☆☆☆	☆☆☆☆☆☆	☆☆☆☆☆☆	Suitable for (No. 370)

((Note) The products in this document are manufactured for use in medical devices that come in contact with living tissue. It is not a thing.

The data in this brochure are representative values and are not guaranteed. The customer must test the selection of the tube by yourself. Specifications are subject to change without notice.