

NAFLON™ PFA CHEMICAL WARES



NAFLON™ PFA CHEMICAL WARES are the containers made from PFA fluorocarbon resin and made by the blow molding method. They have the exceptional chemical resistance, and little elution of impurities for almost all kinds of fluids. What is more, they have higher mechanical strength compared with the glass wares and are unbreakable even if dropped.

Features

- Superior chemical resistance for the strong acids, alkalis and solvents or most corrosive fluids on the market.
- Little elution of impurities.
- High mechanical strength compared with the glass wares.
- High transparency for easily checking the level of the inner fluids.
- Equipped with inside plugs that improve the sealing performance.
- Easily-identifiable date marks punched at the bottom of each ware.
- Wide variety of product lineups, ranging from 20mL to 5L.

Specifications

Lineup

Lineup	Capacity	Parts
Narrow Mouth Bottles	50mL, 100mL, 250mL, 500mL, 1L, 2L, 3L, 5L	Main Body, Inside Plug, Cap
Wide Mouth Bottles	20mL, 100mL, 250mL, 500mL, 1L	Main Body, Inside Plug, Cap
Erlenmeyer Flasks	100mL, 200mL, 300mL	Main Body

Service Range

We recommend that they be used at the ordinary temperatures and pressures. In case of the usage to be heated or pressurized, you are recommended to carry out the verification test on your own according to the application.

Sizes

Narrow Mouth Bottles

Size Capacity	Height (mm)	Outer Diameter of body (mm)
50mL	67	49
100mL	97	48
250mL	129	61
500mL	161	73
1L	198	92
2L	235	126
3L	260	148
5L	313	172

Wide Mouth Bottles

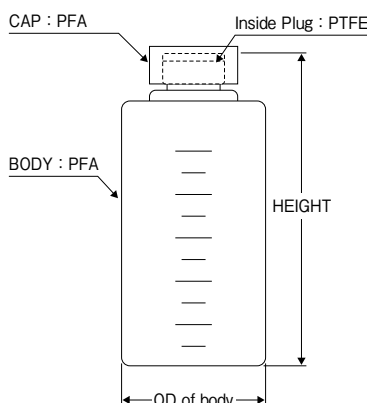
Size Capacity	Height (mm)	Outer Diameter of body (mm)
20mL	59	27
100mL	101	49
250mL	131	60
500mL	170	73
1L	205	93

Erlenmeyer Flasks

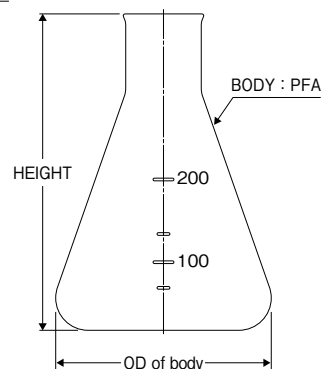
Size Capacity	Height (mm)	Outer Diameter of body (mm)
100mL	98	64
200mL	123	79
300mL	130	88

*For enquiries about capacities please contact us for shapes and others.

■ Narrow Mouth Bottles · Wide Mouth Bottles



■ Erlenmeyer Flasks



Features

Eluted Metals Measurement Results

1 Specimen (n=2) Size ● Narrow Mouth Bottles 500mL and 1L

2 Test Methods A specimen is filled with 3.6% hydrochloric acid with its mouth wrapped by polyethylene. It is stored at an ordinary temperature for one day, the 14 kinds of eluted metals are measured (first time) by ICP-MS method (Test Machine : Agilent Technologies). After washing with ultrapure water, it is stored for an extra day in the same way, then the eluted metals are measured (Second time).

(unit : ppb)

3 Test Results

Element	Specimen	First time		Second time	
		500mL	1L	500mL	1L
Na (Sodium)		0.16	0.21	<0.01	<0.01
Mg (Magnesium)		<0.01	<0.01	<0.01	<0.01
Al (Aluminum)		<0.01	<0.01	<0.01	<0.01
K (Potassium)		0.11	0.07	<0.01	<0.01
Ca (Calcium)		0.41	0.43	0.02	<0.01
Ti (Titanium)		<0.04	<0.04	<0.04	<0.04
Cr (Chromium)		<0.01	<0.01	<0.01	<0.01
Mn (Manganese)		<0.01	<0.01	<0.01	<0.01
Fe (Iron)		0.04	0.02	<0.01	<0.01
Ni (Nickel)		<0.01	0.02	<0.01	<0.01
Cu (Copper)		<0.02	0.02	<0.01	<0.01
Zn (Zinc)		<0.02	0.03	<0.01	<0.01
Mo (Molybdenum)		<0.01	0.06	<0.01	<0.01
Pb (Palladium)		<0.01	<0.01	<0.01	<0.01
Detected amount of eluted metals		0.75	0.86	0.02	—

Pressure cycle tests

1 Specimen (n=1) Size ● Narrow Mouth Bottles 50mL, 100mL, 250mL, 500mL, 1L, 2L, 3L and 5L

2 Test methods A PFA tube of 6 mm diameter with a fitting welded is connected into a specimen. After the cap is tightened by hand, the cycle of 100kPa x 10 sec ⇔ opening x 2 sec is made 1000 times. After the test, leakage and deformation are measured.

3 Test results Each specimen has no leakage and deformation, excluding 5L.

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