

Aluminium Seamless Cylinders

WATER VOLUME (LITRE)	XeF ₂ MASS (MAX)	VALVE CONNECTION *	A (mm)	B (mm)	C (mm)± 3mm	D (mm)± 3mm	MASS (EMPTY)	PART
0.3	600g	1	51	237	-	305	696g	XeF ₂ -22
		2	51	237	276	325	740g	XeF ₂ -23
1.0	2 000g	1	81	298	-	365	1 390g	XeF ₂ -32
		2	81	298	320	370	1 380g	XeF ₂ -33
		4	81	298	-	365	1 690g	XeF ₂ -35
		3	81	298	326	391	1 600g	XeF ₂ -36
3.0	5 000g	5	111	422	450	515	3 500g	XeF ₂ -46
15.3	15 000g	5	184	835	867	947	16 000g	XeF ₂ -55

* 1 = Straight pattern, 1/4" VCR male outlet fitting and cap

* 2 = Angle pattern, 1/4" VCR male outlet fitting and cap

* 3 = High purity tied diaphragm, angle pattern, 1/4" VCR male outlet fitting and cap

* 4 = High purity tied diaphragm, straight pattern, 1/4" VCR male outlet fitting and cap

* 5 = High purity tied diaphragm, angle pattern, CGA716 outlet and cap

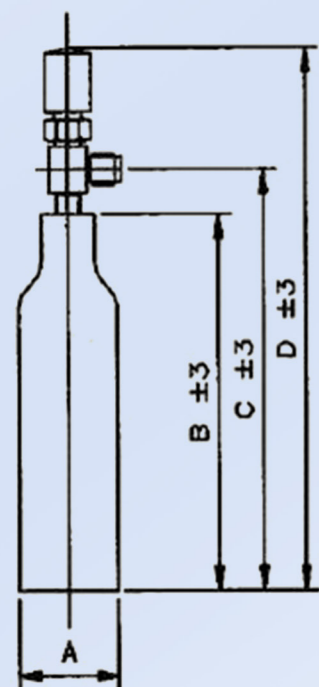


PTFE Bottles

WATER VOLUME	MASS XeF ₂	PART NUMBER
50 ml	1 - 100g	XeF ₂ -11
250 ml	100 - 500g	XeF ₂ -12
500 ml	500 - 1000g	XeF ₂ -13

Application

XeF₂ is a highly isotropic and selective etchant material ideally suited to help create the structures required for MEMS devices along with a range of other etching and cleaning applications.



Product Specification

ELEMENT	SCIENTIFIC NAME	SPECIFICATION	UNITS
Xenon Difluoride	XeF ₂	≥ 99.999	%
Aluminium	Al	≤ 2	ppm Wt
Calcium	Ca	≤ 1	ppm Wt
Chromium	Cr	≤ 3	ppm Wt
Cobalt	Co	≤ 1	ppm Wt
Copper	Cu	≤ 2	ppm Wt
Iron	Fe	≤ 8	ppm Wt
Lithium	Li	≤ 1	ppm Wt
Magnesium	Mg	≤ 1	ppm Wt
Manganese	Mn	≤ 1	ppm Wt
Molybdenum	Mo	≤ 1	ppm Wt
Nickel	Ni	≤ 5	ppm Wt
Potassium	K	≤ 1	ppm Wt
Sodium	Na	≤ 1	ppm Wt
Total Metals	-	≤ 10	ppm Wt

* Product is free of any XeF₄ contamination

Safety Information

- XeF₂ is soluble in water (25g/L at 0°C) and hydrolyses to form HF.
- XeF₂ has strong ozone like odour.
- XeF₂ can be safely destroyed /disposed of by dissolving in warm water and neutralised with calcium carbonate.
- Transfer of XeF₂ from PTFE bottles should be carried out in a dry nitrogen glove box or alternatively under a fume hood.
- XeF₂ reacts with moisture in air to form HF.
- XeF₂ is packaged in a dry nitrogen atmosphere. PTFE bottles are sealed at atmospheric pressure and packaged in a sealed metal can together with a safety absorbent. Cylinders are pressurized to 100 kPa (guage) with helium and leak tested.
- Contact with liquid organic materials (acetone, alcohol etc.) should be avoided due to violent chemical reaction. Paper can spontaneously combust on contact with solid XeF₂.
- XeF₂ should never be stored in/with glass due to reaction and pressure increase.
- XeF₂ is a stable molecule at temperatures up to 500°C.
- Cylinders containing XeF₂ should not be heated above 60°C as this may cost valve leakages.
- Refer to SDS on www.pelchem.com for further information.

Airfreight & Customs Information

CAS No: 13709-36-9

UN No: 3085 (Oxidizing Solid Corrosive N.O.S.)

Hazard Class: 5.1 Oxidizer, Subrisk 8 (Corrosive)

Packaging Group: II

HS or HST code: 2812-90

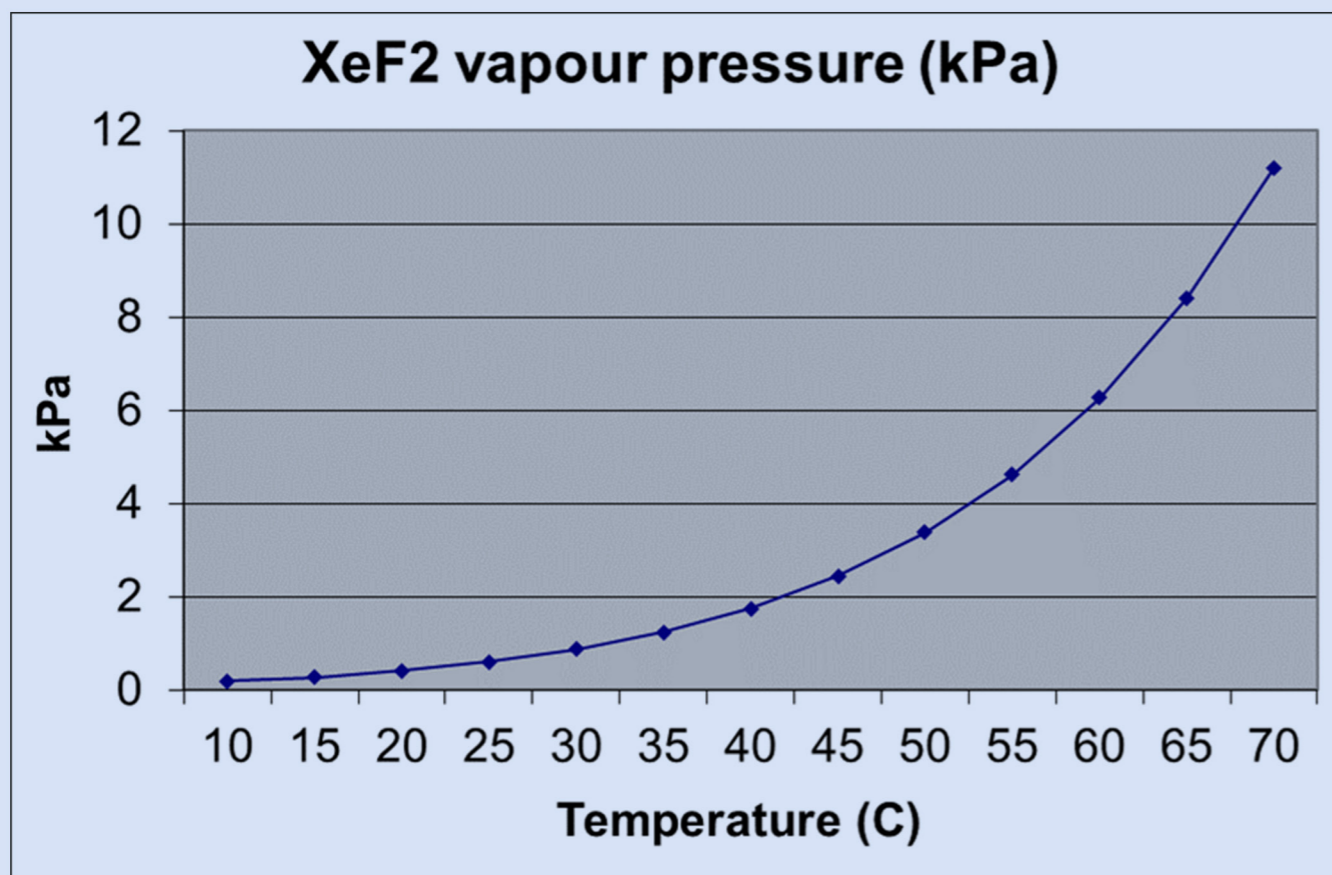
For packaging of consignments:

- Max quantity per inner package 1kg X 5 = 5kg outer packaging, multiple outer packaging allowed (passenger aircraft only)
- Max quantity per inner package 5kg X 5 = 25kg in outer packaging, Multiple outer packaging allowed (cargo aircraft only)



Physical Properties

FORM	Solid crystals
COLOUR	Pungent / Ozone like
ODOUR	Pungent
SOLUBILITY (WATER)	25 g/L at 0°C
DENSITY	4.32 kg/L
PACKAGING DENSITY	2.0 kg/L
MOLECULAR WEIGHT	169.29g/mol
MELTING POINT	129°C
BOILING POINT	114°C
VAPOUR PRESSURE	0.5kPa (4 Torr) at 25°C



Xenon Difluoride XeF₂

chemical excellence

shaping the future

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