



Sulfur hexafluoride. SF₆

Product information Sulfur hexafluoride is used for plasma etching prior to chemical vapor deposition (CVD). Its uses include oxide etching, nitride etching, and wafer cleaning. Sulfur hexafluoride is also used in plasma chamber cleaning processes.

Characteristics Colorless and odorless gas. Asphyxiant in high concentrations. Gas density is heavier than air.

Physical data	Molecular weight	[g/mol]	146.06		
	Boiling point	at 1.013 bar [°C]	-63.9	at 14.5 psi [°F]	-83
Density	at 1.013 bar, 15 °C [kg/m ³]	6.261	at 1 atm., 70 °F [lb/ft ³]	0.382	
Vapor pressure	at 0 °C [bar]	12.9	at 32 °F [psi]	187.2	
	at 20 °C [bar]	21.6	at 70 °F [psi]	321.7	
Flammability range in air (% volume)	Non-combustible				

Product specification	Purity grade	Typical purity	Typical impurities [ppm]						
			N ₂	O ₂	CO	CO ₂	H ₂ O	THC (CH ₄)	Acidity (HF)
5.0N	≥99.999 %	≤2.0	≤1.0	≤5.0	≤5.0	≤0.5	1 ppm	Removed	≤1.0

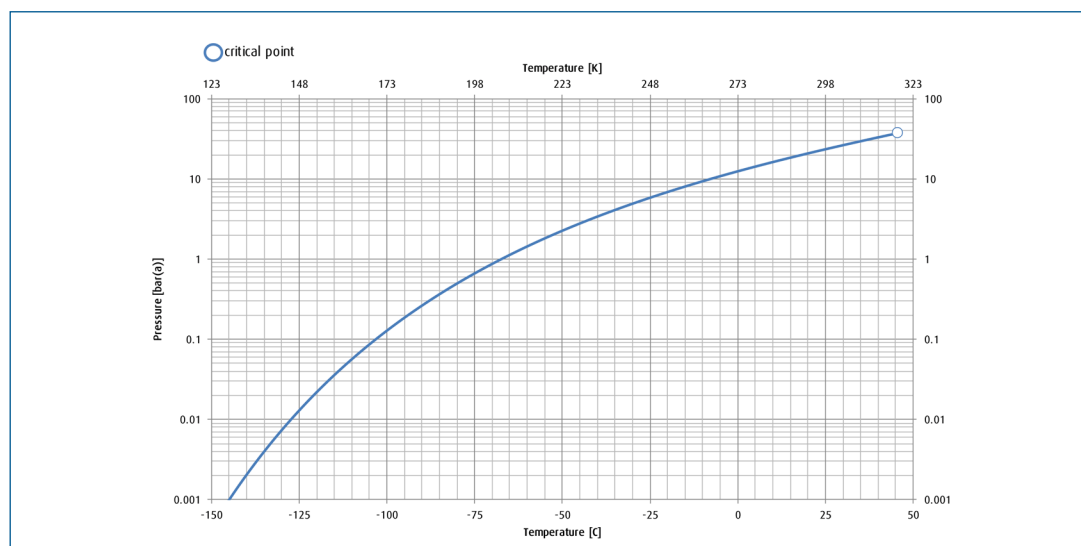
Contact our team for higher grade or different specification products.

Shipping information	UN number	CAS number	EC number	DOT label	Hazard labels required
	1080	2551-62-4	219-854-2	Non-flammable compressed gas	ADR Class 2, 2A DOT Class 2.2

Packaging information

	Package options	Cylinder designation	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure	Valve outlet	Valve material
US	Ton Container	920	446L	Steel	24 in	16.1 in	1100 lb	1150 lb	310 (psig) @ 70°F	CGA 716	SS
	Cylinder	302	46L	Aluminum	9.8 in	53 in	98 lb	100 lb	310 (psig) @ 70°F	CGA 716	SS
	Cylinder	200	44L	Steel	9 in	52 in	133 lb	95 lb	310 (psig) @ 70°F	CGA 716/590	SS
	Cylinder	152	29.5L	Aluminum	8 in	49.5 in	49.5 lb	65 lb	310 (psig) @ 70°F	CGA 716	SS
	Cylinder	80	16L	Steel	7 in	33.25 in	63 lb	40 lb	310 (psig) @ 70°F	CGA 590	SS
	Cylinder	82	16L	Aluminum	7.5 in	34 in	32 lb	40 lb	310 (psig) @ 70°F	CGA 716	SS
EU	Cylinder	50L	50L	Steel	237 mm	1530 mm	63 kg	52 kg	21 (bar) @ 20°C	DIN 6	SS
China	Cylinder	470L	470L	Steel	610 mm	450 mm	1100 kg	500 kg	23 (bar) @ 20°C	CGA 716	SS
	Cylinder	47L	47L	Steel	237 mm	1500 mm	65 kg	50 kg	23 (bar) @ 20°C	CGA 716	SS

Vapor pressure curve



Additional information

The information, recommendations, and data contained in this publication are intended to give basic guidance for safe handling and use of gases. For more information, please refer to Safety Data Sheets. You can locate these through the [Linde Safety Data Sheet Search](#). It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards. Further information and advice on any matter relating to the safe handling or use of these products may be obtained from the nearest Linde office.

Please visit www.linde.com/electronics for Linde Electronics sales offices information.