

Sulfur Hexafluoride SF₆

Synonym: Sulfur Fluoride

Physical Constants of Gas

Molecular Weight 146.054
 Specific Volume 2.5 CF/lb. (0.16 m³/kg)
 Boiling Point -82.7°F (-63.7°C) 1 atm
 Gas Density 70°F 1 atm 6.27 kg/m³

Cylinder Data

CGA Valve Outlet 590, 716
 LB CGA Outlet 110

Shipping Data

Shipping Class 70
 DOT/TC Name Sulfur Hexafluoride
 DOT Class 2.2 (Nonflammable Gas)
 TC Class 2.2 (Nontoxic, Nonflammable Gas)
 WHMIS Class A
 DOT Label Nonflammable Gas
 CAS Registry No. 2551-62-4
 UN No./ATA No. UN1080

Safety Information

Inert gas that does not support life.
 Can cause rapid suffocation.
 May cause frostbite.
 Contact with extreme heat can cause dangerous decomposition products.

Specifications									Recommended Equipment	
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			lbs.	kg	psig	bar	lbs.	kg		
CHEMGAZ 2 H ₂ O < 1 ppm O ₂ < 50 ppm	99.99% Liquid Phase	44	115	52	320	22	248	113	Two-Stage Regulator Q1-318B-590 Q1-14C-590 LB Regulator Q1-20B-110 LB Control Valve Q1-30B	270 275 294 332
		16	40	18	320	22	103	47		
		7	10	5	320	22	38	17		
		LB	0.5	0.2	320	22	4	2		
CHEMGAZ 1† H ₂ O < 5 ppm O ₂ < 80 ppm	99.8% Liquid Phase	44	115	52	320	22	248	113	Two-Stage Regulator Q1-211B-590 Q1-14C-590 LB Regulator Q1-20B-110 LB Control Valve Q1-30B	269 275 294 332
		16	40	18	320	22	103	47		
		7	10	5	320	22	38	17		
		LB	0.5	0.2	320	22	4	2		
Electronic Grade 3 CF ₄ < 5 ppm H ₂ O < 1 ppm N ₂ < 5 ppm O ₂ < 3 ppm	99.999%	44	115	52	320	22	250	113	Two-Stage Regulator Q1-14C-(**)	275
		16	40	18	320	22	105	48		
		7	15	7	320	22	43	20		
Electronic Grade 2 CF ₄ < 10 ppm H ₂ O < 5 ppm N ₂ < 7 ppm O ₂ < 3 ppm THC < 1 ppm Acidity < 1 ppm*	99.998%	44	115	52	320	22	250	113	Two-Stage Regulator Q1-318B-(**) Q1-14C-(**)	270 275
		16	40	18	320	22	105	48		
		7	15	7	320	22	43	20		
Electronic Grade 1 CF ₄ < 100 ppm H ₂ O < 10 ppm N ₂ < 50 ppm O ₂ < 10 ppm Acidity < 1 ppm*	99.96%	44	115	52	320	22	250	113	Two-Stage Regulator Q1-318B-(**) Q1-215B-(**) Q1-14C-(**)	270 271 275
		16	40	18	320	22	105	48		
		7	15	7	320	22	43	20		

* As HF.

** Specify CGA. Other cylinder connections are also available – please contact your Air Liquide representative.

† Meets ASTM and IEC specifications for use as an electrical insulating gas – please inquire.