

ELECTRONIC GASES

SULFUR HEXAFLUORIDE

Sulfur hexafluoride is a colourless, odorless, nontoxic gas. It is readily liquefied and is shipped in steel cylinders as a liquefied gas under its own vapour pressure.

Container Information

CYLINDER SIZE	CONTENTS		Pressure@22°C Valve Outlet DOT Shipping Description:	320 psig CGA-590 Sulfur Hexafluoride 2.2, UN 1080
	LB	KG		
044	66	30	DOT Shipping Labels DOT Guide No. CAS Registry No.	Nonflammable Gas 12 2251-62-4
016	22	10		

Specifications

COMPONENT	ULSI	VLSI
SULFUR HEXAFLUORIDE	99.999%min	99.995%min
Oxygen	< 2 ppm	< 5 ppm
Nitrogen	< 5 ppm	< 20 ppm
Carbon Tetrafluoride	< 2 ppm	< 10 ppm
Water	< 0.5 ppm	< 5 ppm
Total fluorides	< 0.1 ppm	<0.1S ppm
SHELF LIFE: 2 years		

Physical Properties

Molecular Weight	146.1
Flammability Limits in air	Nonflammable
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	5.11
Density, Gas @ 70°F(21.1°C), 1 atm	0.385lb/ft³ (6.2g/l)
Specific Volume, Gas @ 70°F(21.1°C), 1 atm	2.6ft³/lb (163ml/g)
Sublimation Point @ 101.3 kpa	-82.7°F (-63.7°C)
Melting Point @ 224 kpa	-59.4°F (-50.8°C)
Critical Temperature	114°F (45.5°C)
Critical Pressure	545.2 psia (37.6 bar)
Toxicity (as HF, a 4 to 1 ratio)	Simple asphyxiant
TWA	1,000 ppm (OSHA)