Concorde Specialty Gases, Inc.

SF6, Sulfur Hexafluoride Gas

Sulfur Hexafluoride (SF_6) is an inorganic, colorless, odorless, and non-flammable gas. SF_6 primary use is in the electrical industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear, and other electrical equipment, often replacing oil filled circuit breakers (OCBs) that can contain harmful PCBs. SF_6 gas under pressure is used as an insulator in gas insulated switchgear (GIS) because it has a much higher dielectric strength than air or dry nitrogen. This property makes it possible to significantly reduce the size of electrical gear.

99.99% SF6 Grade:

SF6 99.99% Grade Maximum Impurities	
Sulfur Hexafluoride	99.99%
Oxygen (O_2)	<75 ppmw
Nitrogen (N_2)	<200 ppmw
Water (H_2O)	<5 ppmv
Hydrolyzable fluoride, expressed as HF	<0.3 ppmw
Carbon Tetrafluoride (CF_4)	<75 ppmw
Toxicity	None

99.999% SF6 Ultra High Purity Grade:

SF6 99.999% Ultra High Purity Grade Maximum Impurities	
Sulfur Hexafluoride	99.999%
Oxygen (O_2)	< 2 ppmw
Water (H_2O)	< 2 ppmv
Carbon Tetrafluoride (CF_4)	< 2 ppmw

Appearance, Safety Requirements: Colorless gas, compressed under pressure. Non-flammable, non-explosive, has a moderate general toxic action in inhalation contact.

Physical Constants	
Chemical formula	SF_6
Molecular Weight	146.065
Specific volume @ +70°F (+21.1°C)	2.648 ft^3/lb., 0.165 m^3/kg
Critical pressure	545.34. psia, 37.59 bar
Critical temperature	113.97°F, 45.54°C
Specific gravity @ 70°F, 1 atm (Air=1)	5.043
Hazardous Class	2.2
Vapor Pressure	320 psig
Boiling Point	-82.7°F, -63.72°C

Scan the QR reader for additional information.