



Concorde Specialty Gases, Inc.

PRODUCT SPECIFICATIONS SHEET:

Krypton, Kr

Krypton is a rare atmospheric gas which is colorless, tasteless, odorless, nontoxic, and chemically inert. The concentration of Krypton in the atmosphere by volume percent is 1.1×10^{-4} . Krypton is principally shipped and used in gaseous form for excimer lasers, light bulbs, window insulation and R&D laboratory research.

Safety Requirements: The cryogenic liquid will rapidly boil to the gas at standard temperatures and pressures. The liquidified gas can cause frostbite to any contaminated tissue. The main health hazard associated with release of this gas is asphyxiation by displacement of oxygen (see MSDS for further information).

Krypton Research/Scientific Grade:

Krypton Research/Scientific Grade Maximum Impurities	
Krypton	99.999%
Xenon	<3.0 ppmv
Water (H ₂ O)	<0.1 ppmv
Hydrogen	<0.5 ppmv
Oxygen	<0.5 ppmv
Nitrogen	<2.0 ppmv
Total Hydrocarbon Content (THC)	<0.5 ppmv
CF ₄ +C ₂ F ₆ +SF ₆	<2.0 ppmv
CO+CO ₂	<0.5 ppmv

Physical Constants	
Chemical Name	Kr
Molecular Weight	83.80
Density of the gas at 70°F (21.1°C), 1 atm	0.2172 lb/ft ³ , 3.479 kg/m ³
Specific gravity of the gas at 70°F (21.1°C), 1 atm	2.899
Specific volume of the gas at 70°F (21.1°C), 1 atm	4.604 ft ³ /lb, 0.287 m ³ /kg
Boiling Point at 1 atm	-244.0°F, -153.4°C
Melting Point at 1 atm	-251°F, -157°C
Critical Temperature at 1 atm	-82.8°F, -63.8°C
Critical Pressure	798.0 psia, 55.02 bar
Critical Density	56.7 lb/ft ³ , 908 kg/m ³
Triple Point	-251.3°F, -157.4°C
Latent heat of vaporization at normal boiling point	46.2 Btu/lb, 107.5 kJ/kg
Latent heat of fusion at triple point	8.41 Btu/lb, 19.57 kJ/kg