

ELECTRONIC GASES

PHOSPHORUS PENTAFLUORIDE PF₅

Phosphorus Pentafluoride is a highly toxic, colourless, nonflammable, strongly fuming gas with an irritating odor. It reacts with water to form hydrogen fluoride and phosphoric acid. It is shipped as a liquefied gas in size 7X cylinder.

Container Information

CYLINDER SIZE	CONTENTS		Pressure@21.1°C Valve Outlet DOT Shipping Description:	290 psig CGA-330 Phosphorus Pentafluoride, 2.3, UN 2198, Poison Inhalation Hazard, Hazard Zone B Poison Gas
	LB	GRAM		
7X	0.1	47	DOT Shipping Labels DOT Guide No. CAS Registry No.	15 7647-19-0

Specifications

COMPONENT PHOSPHORUS PENTAFLUORIDE	SEMICONDUCTOR 99.0% min.
Nitrogen	< 300 ppm
Oxygen	< 20 ppm
Hydrogen Chloride	< 50 ppm
SHELF LIFE: 1 year	

Physical Properties

Molecular Weight	125.966
Flammability Limits in air	Nonflammable
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	4.46
Density, Gas @ 70°F(21.1°C), 1 atm	0.322lb/ft³ (5.18kg/m³)
Specific Volume, Gas @ 70°F(21.1°C), 1 atm	3.10ft³/lb (0.193m³/kg)
Boiling Point @ 1 atm	-120.1°F (-84.5°C)
Melting Point @ 75.1 psia (518 kPa)	-136.8°F (-938°C)
Critical Temperature	66.1°F (19°C)
Toxicity	
TLV-TWA	2.5 mg/m³

HSG

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