

Phosphine PH₃

Synonyms: Hydrogen Phosphide, Phosphorus Trihydride

Physical Constants of Gas

Molecular Weight 34.0
 Specific Volume 11.4 CF/lb. (0.71 m³/kg)
 Boiling Point -125.9°F (-87.7°C) 1 atm
 Gas Density 70°F 1 atm 1.45 kg/m³

Cylinder Data

CGA Valve Outlet 350, 632

Shipping Data

Shipping Class 200
 DOT/TC Name Phosphine
 DOT Class ... 2.3 (Poisonous Gas) Hazard Zone A
 TC Class 2.3 (2.1) Toxic Gas (Flammable Gas)
 WHMIS Class AB1D1A
 DOT Label Poison Gas, Flammable
 CAS Registry No. 7803-Q1-2
 UN No./ATA No. UN2199

Safety Information

Poisonous, pyrophoric, flammable high-pressure liquid and gas.
 Flammability limits: lower 1.6%; upper 98%.
 Can ignite with air on contact.
 May cause lung, kidney, and central nervous system damage.
 Symptoms may be delayed.
 May be fatal if inhaled.

Specifications									Recommended Equipment	
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			lbs.	kg	psig	bar	lbs.	kg		
Electronic Grade 2 Ar + O ₂ < 0.1 ppm AsH ₃ < 0.1 ppm CO < 0.1 ppm CO ₂ < 0.1 ppm H ₂ O < 0.5 ppm N ₂ < 0.3 ppm O ₂ < 0.1 ppm THC < 0.1 ppm	99.9999%	16	9	4	593	41	74	34	Application Dependent – Please Inquire	—
		7	4	2	593	41	32	15		
Electronic Grade 1 AsH ₃ < 1 ppm CO < 0.2 ppm CO ₂ < 0.3 ppm H ₂ O < 1 ppm N ₂ < 1 ppm O ₂ < 1 ppm O ₂ + Ar < 2 ppm THC < 0.2 ppm	99.9995%	16	9	4	593	41	74	34	Application Dependent – Please Inquire	—
		7	4	2	593	41	32	15		

Need advice on SCOTT™ equipment to safely deliver gas to your point-of-use? Call our Solutions Center at 800.217.2688.