

Propylene C₃H₆

Synonyms: Propene, Methylethylene

Physical Constants of Gas

Molecular Weight 42.08
 Specific Volume 9.4 CF/lb. (0.58 m³/kg)
 Boiling Point -301.45°F (-185.25°C) 1 atm
 Gas Density 70°F 1 atm 1.81 kg/m³

Cylinder Data

CGA Valve Outlet 510
 LB CGA Outlet 110, 170

Shipping Data

Shipping Class 70
 DOT/TC Name Propylene
 DOT/TC Class 2.1 (Flammable Gas)
 WHMIS Class AB1
 DOT Label Flammable Gas
 CAS Registry No. 115-07-1
 UN No./ATA No. UN1077

Safety Information

Flammable liquid and gas.
 Flammability limits: lower 2%; upper 11.1%.
 Can form explosive mixtures in air.
 May cause frostbite.

Specifications								Recommended Equipment		
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			lbs.	kg	psig	bar	lbs.	kg		
CHEMGAZ 2 H ₂ O < 5 ppm O ₂ < 2 ppm	99.9% Liquid Phase	1000	408	185	137	10	735	333	Single-Stage Regulator	
		108*	95	43	137	10	169	77	Q1-205A-4G-510	
		44	33	15	137	10	171	78	LB Regulator	
		22LP	19	9	137	10	40	18	Q1-20B-170	
		LB	0.4	0.2	137	10	4	2	LB Control Valve Q1-30B	
CHEMGAZ 1 CH ₄ < 100 ppm O ₂ < 25 ppm	99.5% Liquid Phase	1000	408	185	137	10	735	333	Single-Stage Regulator	
		108*	95	43	137	10	169	77	Q1-205A-4G-510	
		44	33	15	137	10	171	78	LB Regulator	
		22LP	19	9	137	10	40	18	Q1-20B-170	
		LB	0.4	0.2	137	10	4	2	LB Control Valve Q1-30B	
Electronic Grade 3 C ₂ H ₆ < 2 ppm C ₃ H ₈ < 90 ppm C ₄ H ₈ < 5 ppm C ₄ H ₁₀ < 5 ppm 1,3-C ₄ H ₆ < 5 ppm CH ₄ < 1 ppm H ₂ O < 2 ppm N ₂ < 5 ppm O ₂ < 2 ppm Metals Al < 10 ppb wt Cd < 10 ppb wt Cr < 10 ppb wt Cu < 5 ppb wt Fe < 5 ppb wt Ni < 5 ppb wt Zn < 5 ppb wt Total Others < 200 ppb wt	99.98%	44P	40	18	137	10	165	75	Single-Stage Regulator Q1-3300A-510	270

* Can be furnished with a full-length eductor tube.

Air Liquide also manufactures liquid and vapor calibration standards in a propane balance for analysis of trace impurities in hydrocarbon process streams. Contact your Air Liquide representative for more information.

Most SCOTT™ gas handling and distribution equipment is available for same-day shipping.

Propylene continued

Specifications									Recommended Equipment	
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			lbs.	kg	psig	bar	lbs.	kg		
Electronic Grade 2 C ₂ H ₆ < 2 ppm C ₃ H ₈ < 90 ppm C ₄ H ₈ < 5 ppm C ₄ H ₁₀ < 5 ppm 1,3-C ₄ H ₆ < 5 ppm CH ₄ < 1 ppm H ₂ O < 2 ppm N ₂ < 10 ppm O ₂ < 3 ppm	99.98%	44	40	18	137	10	165	75	Single-Stage Regulator Q1-3300A-510	270
Electronic Grade 1 C ₂ H ₆ < 30 ppm C ₃ H ₈ < 290 ppm CH ₄ < 5 ppm H ₂ O < 5 ppm N ₂ < 10 ppm O ₂ < 5 ppm	99.97%	44	40	18	137	10	165	75	Single-Stage Regulator Q1-3300A-510	270

We stock SCOTT™ regulators, manifolds, flowmeters, point-of-use panels, cabinets, valves and related equipment.