Argon

Physical Properties

Specific Gravity (70°F,1 atm) 1,380
Specific Volume (70°F,1 atm) . . . . . 9.671 ft^3/lb
Density of Saturated Vapor (1 atm) . . . . . .0.3605 $lb./ft^3$
Ration of Specific Heats @ 86° F 1.669
Coefficient Viscosity (Microscopes @ 77°F)
1 atm 227.8
Ionization Potential . . . . . 15.7 Volts
Excitation Potentials (First Res. Pot.). . . . . 11.56 Volts
Metastable 11.66 Volts
Potentials. . . . . 11.49 Volts
Molecular Weight 39.948
Boling Point (1 atm) . . . . . .-302.6°F (-185.9°C)
Triple Point (1 atm) . . . . . .-308.9°F (-189.4°C)
Liquid Density (SAT, 1 atm) . . . . . .11.63 lb/gal
Critical Temperature . . . . . -188.1°F
Critical Pressure . . . . . .711.5 psia
Specific Heat Capacity Cp @ 77°F . . . . . .0.1244 BTU/lb
Latent Heat at Boiling Point (BTU/lb) 69.7
Thermal Conductivity Gas @ 0°C . . . . . .0.0098 BTU/ft-hr-°F

Argon Specifications (Units in ppm [v/v] unless shown otherwise)

Limiting Characteristics	Gaseous CGA G-11.1 Type II, Grade C	Liquid & MTG Typical
Argon Min. %	99.997	99.998
Water	10.5	3.5
Dewpoint, °F	-76	-90
Oxygen	5	2
Nitrogen	20	10
Hydrogen	1	1
Combined Total Hydrocarbons (as methane) and Carbon Dioxide	3	3

Conversion Data

	WEIGHT		GAS		LIQUID	
	POUNDS Lb	KILOGRAMS Kg	CUBIC FEET SCF	CUBIC METERS Nm^3	GALLONS Gal	LITERS L
1 Pound	1.0	0.4536	9.671	0.2543	0.08600	0.3255
1 Kilogram	2.205	1.0	21.32	0.5605	0.18957	0.7176
1 Ton	2000	907.2	19,342	508.6	172.0	651.0
1 SCF Gas	0.1034	0.04690	1.0	0.02628	0.008893	0.03366
1 Nm^3 Gas	3.933	1.7840	38.04	1.0	0.3382	1.2802
1 Gal Liquid	11.63	5.276	112.5	2.957	1.0	3.785
1 L Liquid	3.072	1.3936	29.71	0.7812	0.2642	1.0