UŽDAROJI AKCINĖ BENDROVĖ
PREKYBOS NAMAI "WALDIS"
D.Vandens 7, 91246 Klaipėda

ARGON

Ar
CAS Nr. [7440-37-1]
UN1006 (gas) UN1951(liquid refrigerated)

1	Molecular Weight	Molecular weight : 39.948 g/mol
2	Solid phase	Melting point : -189 °C Latent heat of fusion (1,013 bar, at triple point) : 29.41 kJ/kg
3	Liquid phase	Liquid density (1.013 bar at boiling point) : 1392.8 kg/m^3 Liquid/gas equivalent (1.013 bar and 15 °C (59 °F)) : 835 vol/vol Boiling point (1.013 bar) : -185.9 °C Latent heat of vaporization (1.013 bar at boiling point) : 160.81 kJ/kg
4	Critical point:	Critical temperature : -122.3 °C Critical pressure : 48.98 bar Critical density : 537.7 kg/m^3
5	Triple point	Triple point temperature : -189.4 °C Triple point pressure : 0.687 bar
6	Gaseous phase	Gas density (1.013 bar at boiling point) : 5.853 kg/m^3 Gas density (1.013 bar and 15 °C (59 °F)) : 1.67 kg/m^3 Compressibility Factor (Z) (1.013 bar and 15 °C (59 °F)) : 0.9993 Specific gravity (air = 1) (1.013 bar and 21 °C (70 °F)) : 1.38 Specific volume (1.013 bar and 21 °C (70 °F)) : 0.606 m^3/kg Heat capacity at constant pressure (Cp) (1 bar and 25 °C (77 °F)) : 0.02 kJ/(mol.K) Heat capacity at constant volume (Cv) (1 bar and 25 °C (77 °F)) : 0.012 kJ/(mol.K) Ratio of specific heats (Gamma:Cp/Cv) (1 bar and 25 °C (77 °F)) : 1.664 Viscosity (1.013 bar and 0 °C (32 °F)) : 0.0002099 Poise Thermal conductivity (1.013 bar and 0 °C (32 °F)) : 16.36 mW/(m.K)
7	Miscellaneous	Solubility in water (1.013 bar and 0 °C (32 °F)) : 0.0537 vol/vol Concentration in air : 0.934 vol %

Use: Argon can be used in a controlled atmosphere to replace nitrogen in most applications. Its solubility (twice that of nitrogen) and certain molecular characteristics give it special properties for use with vegetables. Under certain conditions, it slows down metabolic reactions and significantly reduces breathing. Argon is used to prevent contact, hence interaction, between liquid metal and the surrounding atmosphere. Applications include melt stirring, tun dish purging to prevent steel re-oxidation and secondary steel refining in vacuum degassers, such as the VOD, RH, RH-OB. However, the largest quantities of argon are consumed in the AOD process for decarburising raw high-chromium steels while minimizing the chromium oxidation.

Transportation:
Cylinders