

Argon. (Ar)

Noble-gas shielding for flawless welds — industrial and high-purity grades.

Aluminium, stainless and exotic alloys forgive nothing — their welds are only as good as the gas that shields them. KIGL Argon brings total inertness to the arc, in welding and high-purity grades, filled and verified at our PESO-approved Noonmati facility, serving the North East for seventy-five years.

99.999%

High-purity grade available

Inert

Noble gas; reacts with nothing

TIG / MIG

Ready for aluminium and stainless

75 yrs

Manufacturing excellence, serving North East India

GRADES

PARAMETER	ARGON WELDING	ARGON HIGH PURITY
Purity (Ar, v/v)	≥ 99.99%	≥ 99.999%
Oxygen	≤ 50 ppm	≤ 5 ppm
Moisture	≤ 20 ppm	≤ 5 ppm
Reference standard	KIGL specification	KIGL specification

Values typical, verified per filling batch; Certificate of Conformity on request. Argon-CO₂ and other shielding mixtures available.

Total inertness, total control.

Argon is the only practical gas that is utterly inert at arc temperatures — no oxidation, no nitriding, no porosity. That is what keeps a TIG bead on stainless bright and an aluminium weld sound. For laboratory and analytical work, the high-purity grade adds tight oxygen and moisture limits for carrier-gas and instrument service.

PHYSICAL PROPERTIES

PROPERTY	VALUE
Molecular weight	39.95
State of product in cylinder	Compressed gas
Boiling point at 1 atm (°C)	−185.9
Liquid density at boiling point (g/ml)	1.394
Gas density at 20 °C, 1 atm (kg/m ³)	1.66

PROPERTY	VALUE
Relative density (air = 1)	1.38
Critical temperature (°C)	−122.3
Appearance / odour	Colourless, odourless
Flammability	Non-flammable; monatomic noble gas
Main hazard	Asphyxiant; heavier than air

USES & APPLICATIONS

Wherever the metal or the measurement cannot tolerate contamination, argon takes over:

WELDING & METALS

- TIG and MIG shielding of aluminium, stainless and copper alloys
- Root purging of stainless pipe welds
- Argon–CO₂ and ternary shielding mixtures
- Plasma welding and cutting processes

SPECIALITY & LABORATORY

- Carrier gas for gas chromatography and instruments
- Bright annealing and heat-treatment atmospheres
- Metallurgical degassing of steel and aluminium
- Lamp, window and double-glazing fill

Recommended control equipment available from KIGL: argon regulators with flowmeters, changeover manifolds and purging equipment.

SAFE HANDLING

- **Argon is an asphyxiant** — it displaces oxygen without any warning smell. Ensure good ventilation at all times.
- **Never enter a confined space** that may contain argon without testing the atmosphere and following entry procedures.
- **Argon is heavier than air** and collects in pits, tanks and low-lying areas — ventilate at floor level.
- Handle high-pressure cylinders with care: secure upright, valve caps on when not in use, move with a trolley.
- Use regulators rated for the cylinder pressure; store ventilated and leak-test with soap solution.

Let's talk gas.

ENQUIRIES · ORDERS · EQUIPMENT

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Also: Oxygen · Medical Oxygen · Nitrogen · CO₂ · Acetylene · Mixtures