

ARCAL[™] 1 with ALTOP[™]

Argon (ISO 14175-I1) Shielding Gas
for High-Performance Arc Welding



Recommended Applications for ARCAL 1

- TIG welding of all materials
- MIG welding of aluminum and copper alloy
- Plasma and annular gas in plasma processes
- Arc striking gas in plasma cutting
- Purging and backing gas for GTAW applications of all materials
- Orbital GTAW and MIG brazing
- Plasma welding and YAG laser welding and brazing
- All welding positions in manual, automatic or robotic processes

Now available with our exclusive ALTOP
cylinder cap, valve and regulator all in one.



Benefits and Features

- Recommended for GTAW applications, including carbon steels, stainless steels, aluminum, nickel and copper alloys.
- Recommended for GMAW welding of aluminum and copper alloys.
- Low impurity level minimizes surface oxidation, porosities and crack sensitivity.
- Produces high-integrity welds for materials highly sensitive to oxygen, nitrogen or moisture contaminations.
- Exceeds requirements of AWS A-5.32 specification for shielding gases, Classification SG-A.
- Dedicated cylinders and lot-batched to ensure purity and traceability.
- ALTOP: the complete high-pressure gas solution that saves time and money, and improves safety substantially.



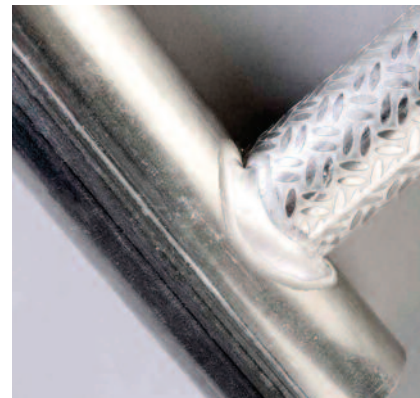
ARCAL™ 1 with ALTOP™

Argon (ISO 14175-I1) Shielding Gas for High-Performance Arc Welding



Available with ALTOP Exclusively from Air Liquide

- No pressure regulators to buy or maintain
- Eliminates lost time due to regulator malfunction
- Patented lever-activated valve provides fast emergency shutoff
- Visual reading of cylinder contents prevents accidental return of cylinders containing unused gas
- Ergonomic design permits safer and easier maneuvering of cylinder



Available Packaging for ARCAL 1

	50-Cylinder	16-Cylinder Pack*	Portable Liquid Cylinder	Bulk
Pressure (psi)	2640	2640	•	•
Volume (scf)	336	5376	•	•

- * ARCAL 1 is available in single cylinders and 16-cylinder packs when larger quantities are needed.
- Consult your Air Liquide representative.

Quality Assurance and Purity Guarantee

	Argon Industrial Grade	AWS A-5.32 Specification	ARCAL 1
Purity	99.997% (typical)	≥ 99.997%	≥ 99.997%
Analysis	–	–	Batch Analysis
Moisture	–	10.5 ppm max	10 ppm max
Oxygen	–	–	10 ppm max



Gas tungsten arc welding on aluminum using ARCAL 1 high-purity argon prevents fusion defects, porosity and weld metal embrittlement.

Your Safety is our Concern

Before using ARCAL 1 or any other compressed gas, always read and understand the appropriate Material Safety Data Sheet (MSDS).



Founded in 1902, Air Liquide is the world leader in industrial and medical specialty gases and related services, providing innovative solutions for the manufacture of everyday products and for the protection of life.

NOTE: This brochure is intended for general information purposes only and is not intended as a representation or warranty of any kind, or as a statement of any terms or condition of sale. The information herein is believed to be correct, but is not warranted for correctness or completeness or for applicability to any particular customer or situation.

ALTOP, ARCAL and Molecules that Matter are trademarks of the Air Liquide Group.
©2010 Air Liquide America Specialty Gases LLC



Air Liquide America Specialty Gases LLC
6141 Easton Road
Box 310
Plumsteadville, PA 18949
Phone: 800.217.2688
Fax: 215.766.2476
Email: solutions.center@airliquide.com
www.ALspecialtygases.com