

ARGON - (Ar)

5.0

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| DESCRIPTION : A colorless, non flammable, high-pressure gas. It acts as a simple asphyxiant by displacing air. | APPLICATIONS : Carrier/Purge gas; blanket gas to exclude air from certain fabrication processes, especially in crystal growing; ion milling and other etching processes; ion implantation; sputtering; gate oxidation anneal gas. Sputtering grade argon can be especially useful for high-purity sputtering, which requires all oxides, carbons and nitrogen at very low levels. | ADR Classification : 2, 1 A ADR Label 2.2 Non flammable, non toxic gas MSDS REFERENCE : 003A CHEMICAL ABSTRACTS : 7440-37-1 UN No. : 1006 |
|--|---|---|

| PRODUCT | | PRESSURE BARG | VALVE TYPE | VALVE OUTLET DIN 477 No | VALVE MATERIALS OF CONSTRUCTION |
|----------|-------------------|------------------|------------|-------------------------------|------------------------------------|
| CYLINDER | CONTENTS | | | | |
| 50H | 11 m ³ | 200 | Diaphragm | 6 | Brass |

| PRODUCT CHARACTERISTICS | PRAXAIR SPECIFICATIONS | METHOD OF ANALYSIS (SEE KEY) |
|----------------------------|------------------------|------------------------------|
| MINIMUM PURITY | 99.999 % | |
| Total Hydrocarbons (THC) | ≤ 0,2 ppm | B |
| Hydrogen (H ₂) | ≤ 1 ppm | I |
| Nitrogen (N ₂) | ≤ 5 ppm | S |
| Oxygen (O ₂) | ≤ 2 ppm | D |
| Water (H ₂ O) | ≤ 3 ppm | E |

Notes :

- ◆ Cylinder sizes, contents, valve types and valve connections other than those indicated above are available on request.
- ◆ All expressions for concentration are for gas phase, by volume unless otherwise noted.
- ◆ MSDS Ref.: More detailed Safety Information can be obtained from the Material Safety Data Sheet No. 003A

| Key to Analytical Techniques | | | |
|------------------------------|--|---|---|
| A | Gas Chromatograph with Thermal Conductivity Detector | D | Specific Oxygen Analyzer |
| B | Gas Chromatograph with Flame Ionization Detector | E | Specific Water Analyzer |
| C | Gas Chromatograph with Ultrasonic Detector | F | Total Hydrocarbon Analyzer |
| | | G | Infrared |
| | | H | Proprietary |
| | | I | Gas Chromatograph with Helium Ionization Detector |
| | | J | Flame Ionization with Methanizer |
| | | K | Gas Chromatograph - Photo Ionization |
| | | L | Gas Chromatograph - Flame Photometric |
| | | M | Mass Spectrometry |
| | | N | Wet Chemical |
| | | O | Gas Chromatograph with Discharge Ionization Detector |
| | | P | Gas Chromatograph with Methanizer Carbonizer |
| | | Q | Gas Chromatograph with Electrolytic Conductivity |
| | | R | Gas Chromatograph with Reduction Gas Analyzer |
| | | S | Gaschromatograph with High Frequency Discharge Detector |

IMPORTANT

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