

# HELIUM - (He)

5.6

|   |  |  |
|---|--|--|
| <b>DESCRIPTION :</b><br>A colorless, non flammable, high-pressure gas.<br>It acts as a simple asphyxiant by displacing air. | <b>APPLICATIONS :</b><br>Carrier/Purge gas; blanket gas to exclude air from certain fabrication processes. Helium 5.6 can be especially useful for purging of lines and equipment used for VLSI and ULSI device fabrication. | <b>ADR Item No.</b> : 2, 1 A                         |
|   |  | <b>ADR</b><br>Label 2.2 Non flammable, non toxic gas |
|   |  | <b>MSDS REFERENCE</b> : 061A                         |
|   |  | <b>CHEMICAL ABSTRACTS</b> : 7440-59-7                |
|   |  | <b>UN No.</b> : 1046                                 |

| PRODUCT  |                    | PRESSURE BARG | VALVE TYPE | VALVE OUTLET DIN 477 No | VALVE MATERIALS OF CONSTRUCTION |
|----------|--------------------|---------------|------------|-------------------------|---------------------------------|
| CYLINDER | CONTENTS           |               |            |                         |                                 |
| 50H      | 9,3 m <sup>3</sup> | 200           | Diaphragm  | 6                       | 316L SS                         |

| PRODUCT CHARACTERISTICS                | PRAXAIR SPECIFICATIONS | METHOD OF ANALYSIS (SEE KEY) |
|--|------------------------|------------------------------|
| <b>MINIMUM PURITY</b>                  | <b>99,9996 %</b>       |                              |
| Carbon Dioxide (CO <sub>2</sub> ) + CO | ≤ 0,2 ppm              | J                            |
| Total Hydrocarbons (THC)               | ≤ 0,1 ppm              | J                            |
| Nitrogen (N <sub>2</sub> )             | ≤ 2 ppm                | S                            |
| Oxygen (O <sub>2</sub> )               | ≤ 0,5 ppm              | D                            |
| Water (H <sub>2</sub> O)               | ≤ 2 ppm                | E                            |
| Hydrogen (H <sub>2</sub> )             | ≤ 0,1 ppm              | I                            |

**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. 061A

| 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 | Gas Chromatograph with High Frequency Discharge Detector |

**IMPORTANT**

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