

	<b>UN 1006</b> <b>HAZCHEM 2RE</b> <b>CLASS 2.2</b>	<b>PI 06/16/E</b>  <b>COMPRESSED ARGON</b>
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**TECHNICAL SPECIFICATION**

<p><b>SPECIFICATION</b> Argon &gt; 99.9%</p> <p><b>PHYSICAL DATA</b> Chemical Symbol Ar Boiling Point -185.9°C Relative Density (Air = 1) 1.4 Molecular Weight 39.948 Critical Temperature -122.4°C Flashpoint Non-flammable Density of Gas (@101.3 kPa &amp; 15°C) 1.78 kg/m<sup>3</sup> Density of Liquid (B.Pt.) 1393 kg/m<sup>3</sup> Specific Volume (@101.3 kPa &amp; 15°C) 0.591 m<sup>3</sup>/kg</p> <p><b>PROPERTIES</b> Argon is colourless, odourless and constitutes approx. 0.9% of the atmosphere Argon does not support life, it is non-toxic. It is non-flammable and will not support combustion.</p> <p><b>USES</b> Owing to its chemical inertness, argon is employed for welding in inert gas atmospheres. Argon, either pure or in combination with carbon dioxide, oxygen, hydrogen or helium, is the most widely used gas in welding applications.</p>	<p>Argon is employed in metallurgy for heat treatment in a protective atmosphere, notably for the annealing of high carbon steels, to avoid decarburization. It serves as a carrier gas for silane in the deposition of silicon. Argon is employed in the iron and steel industry in the following manner: In the gaseous state, it serves in degassing and de-sulfuration of molten steel and iron baths. In the area of electrical lighting, argon is used to fill:</p> <ul style="list-style-type: none"> <li>incandescent light bulbs.</li> <li>phosphorescent tubes, in mixtures with neon, helium and mercury vapour.</li> <li>thyatron radio tubes, in mixtures with neon.</li> </ul> <p>Argon is also employed as a carrier gas in chromatography. Mixed with methane, argon is used for flushing Geiger-Muller counters employed for the detection of X- and <math>\gamma</math>-rays. These instruments are employed in monitoring nuclear radiation and for the analysis of spectra emitted by X-ray fluorescence analytical devices.</p> <p><b>SUPPLY &amp; STORAGE</b> In high pressure cylinders</p>
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**HANDLING & SAFETY**

<p><b>HAZARDS</b> Should argon replace oxygen in air there is a risk of asphyxia: air containing less than 16% oxygen is dangerous.</p> <p><b>MATERIALS COMPATIBILITY</b> Argon is non-corrosive and so any common metal is acceptable, provided equipment is designed to withstand process pressure (for gaseous argon).</p> <p><b>PRECAUTIONS IN USE</b> Use only in well-ventilated area to prevent accumulation of high concentration of argon. Ensure that oxygen content of air is maintained above 18%. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.</p> <p><b>PERSONAL PROTECTION</b> Safety eyewear complying with an approved standard &amp; use a properly fitted, air-purifying or air-fed respirator complying with an approved standard when a risk assessment indicates this is necessary</p> <p><b>FIRST AID</b> If victim is conscious:</p> <ul style="list-style-type: none"> <li>Move to uncontaminated area to breathe fresh air.</li> <li>Keep warm and quiet. Call Doctor</li> </ul>	<p><b>FIRST AID contd</b> If victim is unconscious:</p> <ul style="list-style-type: none"> <li>Move to uncontaminated area and give assisted respiration.</li> <li>When breathing is restored, treatment as above.</li> </ul> <p>Continued treatment should be symptomatic and supportive.</p> <p><b>ADDITIONAL INFORMATION</b> The information, recommendations and data contained in this publication are intended to give basic guidance to users for their safe handling and use. For Further information please refer Material Safety Data Sheets (MSDS)</p> <p>It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards.</p>
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