Magnesium metal is an interesting material for the storage of hydrogen because of its low cost and high hydrogen storage capacity. Magnesium is silvery white and very light. Its relative density is 1.74g/cm³. Magnesium is known for a long time as the lighter structural metal in the industry, due to its low weight and to its capability of forming mechanically resistant alloys.

**Characteristics**
- High density
- Low impurity content
- Corrosion-resistant
- Very chemically active
- Good conductivity

**Quick Facts**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Formula</td>
<td>Mg</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>24.31 g/mol</td>
</tr>
<tr>
<td>Density</td>
<td>1.74 g/cm³</td>
</tr>
<tr>
<td>Melting Point</td>
<td>648 °C</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>1090 °C</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>0.37 W/(mK)</td>
</tr>
<tr>
<td>Electrical Resistivity</td>
<td>43.9μΩcm (at 20 °C)</td>
</tr>
<tr>
<td>Thermal Expansion</td>
<td>24.8μm/(mK) (at 25 °C)</td>
</tr>
<tr>
<td>Heat of Fusion</td>
<td>2.16 Cal/gm mole</td>
</tr>
<tr>
<td>Specific Heat</td>
<td>0.243 Cal/g/K @ 25 °C</td>
</tr>
</tbody>
</table>

**Purity**: 99.9%

**Benefits**
- Lightweight constructions in automotive
- Aircraft and aerospace applications
- Hydrogen water stick
- Aluminum metal products
- Missile construction
- E-beam evaporation
- Semiconductor
- Evaporation materials and high purity metals for Optics,
  Wear Protection, Microelectronics
- Large Area Coating applications
- Filter elements

**Magnesium**

High Purity Metal

Available in:
- Pieces
- Rods
- Shots
- Chips
- Pellets
- Wires
- Ingots
- Bars
- Granules

**ISO 9001:2015 CERTIFIED COMPANY**