CARUS® Mn P manganese sulfate is an important component in radium removal systems utilizing Hydrous Manganese Oxide (HMO). This NSF certified manganese sulfate provides one of the components necessary for the production of HMO. CARUSOL® liquid permanganate completes the system, allowing for the formation of highly adsorbent hydrous manganese oxide.

**PRODUCT SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Assay</th>
<th>≥ 98.0% as MnSO₄ • H₂O</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH, 5% solution</td>
<td>6.0 - 9.0</td>
</tr>
<tr>
<td>Insolubles, %</td>
<td>≤ 0.2%</td>
</tr>
</tbody>
</table>

**Standards and Specifications**

CARUS Mn P manganese sulfate is certified by the National Sanitation Foundation (NSF) to ANSI/NSF Standard 60: Drinking Water Treatment Chemicals - Health Effects.

**CHEMICAL/PHYSICAL DATA**

- **Formula**: MnSO₄ • H₂O
- **Formula Weight**: 169.0 g/mol
- **Form**: White to pink powder
- **Bulk Density - Compacted**: Approximately 69 lb/ft³

**APPLICATIONS**

CARUS Mn P manganese sulfate is utilized as a major component in the creation of Hydrous Manganese Oxide (HMO) for the removal of radium.

**CARUS CORPORATION**

During its more than 100-year history, Carus’ ongoing emphasis on research and development, technical support, and customer service has enabled the company to become the world leader in permanganate, manganese, oxidation and base-metal catalyst technologies.