

## Epsogrow (Epsom Salt)

10.97 VN 5261

(Magnesium Sulphate Heptahydrate)

<b>Formula:</b>	MgSO <sub>4</sub> · 7H <sub>2</sub> O																					
<b>Nature:</b>	White crystals																					
<b>Content:</b>	More than 48% MgSO <sub>4</sub>																					
<b>Typical Analysis:</b>	<table> <tr> <td>MgSO<sub>4</sub></td> <td>49%</td> <td>or 16 % MgO (10 % Mg)</td> </tr> <tr> <td></td> <td></td> <td>33 % SO<sub>3</sub> (26 % SO<sub>2</sub>, 13 % S)</td> </tr> <tr> <td></td> <td></td> <td>respectively</td> </tr> <tr> <td>H<sub>2</sub>O</td> <td>51%</td> <td></td> </tr> <tr> <td>K<sub>2</sub>SO<sub>4</sub>, CaSO<sub>4</sub></td> <td>0.1%</td> <td></td> </tr> <tr> <td>KCl, NaCl</td> <td>0.04%</td> <td></td> </tr> <tr> <td></td> <td style="border-top: 1px solid black;">100%</td> <td></td> </tr> </table>	MgSO <sub>4</sub>	49%	or 16 % MgO (10 % Mg)			33 % SO <sub>3</sub> (26 % SO <sub>2</sub> , 13 % S)			respectively	H <sub>2</sub> O	51%		K <sub>2</sub> SO <sub>4</sub> , CaSO <sub>4</sub>	0.1%		KCl, NaCl	0.04%			100%	
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<b>Density:</b>	1.7 g/cm <sup>3</sup>																					
<b>Molecular weight:</b>	246.47 g/mole																					
<b>Bulk density:</b>	abt. 0.97 g/cm <sup>3</sup>																					
<b>Angle of repose</b>	Standard: abt. 33°																					
<b>Melting point:</b>	Incongruent melting above 48.1°C with formation of MgSO <sub>4</sub> · 6 H <sub>2</sub> O and a saturated solution of it																					
<b>Solubility:</b>	Readily soluble in water, practically no residues left																					
<b>Saturation point:</b>	25.8% MgSO <sub>4</sub> by weight at 20° C																					
<b>Grain size:</b>	Standard: Predominantly between 0.1 and 3 mm Fine cryst.: Mainly < 0.8 mm																					
<b>Packing:</b>	25 kg, 50 kg, 100 lb or big bags																					
<b>Special characteristics:</b>	<p>Epsom Salt, esp. when very pure and without any additives, is sensitive against variations of temperature and humidity. At 20°C and a relative atmospheric moisture of &lt; 45% it gradually releases water by simultaneous weathering (growing opacity of crystals); at &gt; 90% it absorbs water and deliquesces. Epsom Salt transforms into MgSO<sub>4</sub>·6H<sub>2</sub>O below a certain water vapour pressure according to temperature. It is not stable above 48.1°C. If shipped in closed containers Epsom Salt after having been exposed to warm temperatures recrystallization very often results in caking</p> <p>Epsom Salt normally contains less than 0.6 ppm vanadium, which is of essential importance in the manufacture of detergents.</p>																					
<b>Uses:</b>	<p>Quick-acting fertilizer (e.g. foliar sprays); in construction, pulp and detergent industries; for the production of certain plastics, adhesives, refractory materials, synthetic seawater, pigments etc., as cattle feed for flue gas desulphurization.</p> <p>As a pure magnesium sulphate it is used for the manufacture of other Mg-compounds in many branches of trade and industry.</p>																					