



EpsomSalt (Epsom Salt)
(Magnesium Sulphate Heptahydrate)

10.97 VN 5261

Formula:	MgSO ₄ · 7H ₂ O		
Nature:	White crystals		
Content:	More than 48% MgSO ₄		
Typical Analysis:	MgSO ₄	49%	or 16 % MgO (10 % Mg) 33 % SO ₃ (26 % SO ₂ , 13 % S) respectively
	H ₂ O	51%	
	K ₂ SO ₄ , CaSO ₄	0.1%	
	KCl, NaCl	0.04%	
		100%	
Density:	1.7 g/cm ³		
Molecular weight:	246.47 g/mole		
Bulk density:	abt. 0.97 g/cm ³		
Angle of repose	Standard: abt. 33°		
Melting point:	Incongruent melting above 48.1°C with formation of MgSO ₄ · 6 H ₂ O and a saturated solution of it		
Solubility:	Readily soluble in water, practically no residues left		
Saturation point:	25.8% MgSO ₄ by weight at 20° C		
Grain size:	Standard: Predominantly between 0.1 and 3 mm Fine cryst.: Mainly < 0.8 mm		
Packing:	25 kg, 50 kg, 100 lb or big bags		
Special characteristics:	<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 < 45% it gradually releases water by simultaneous weathering (growing opacity of crystals); at > 90% it absorbs water and deliquesces. Epsom Salt transforms into MgSO₄·6H₂O 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>		
Uses:	<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>		