

Solution of Magnesium Chloride Specification

Specification **S_{ES} 33 %**
Trade name Brine of Magnesium chloride
Formula MgCl₂

Chemical composition	Average		Concentration range	
	g/l	%	%	%
Magnesium chloride (MgCl ₂)	448 g/l	33,0 %	32 %	34 %
Potassium chloride (KCl)	2,0 g/l	0,15 %	0,1 %	0,2 %
Sodium chloride (NaCl)	5,2 g/l	0,35 %	0,3 %	0,5 %
Magnesium sulphate (MgSO ₄)	38,3 g/l	2,8 %	2,5 %	3,0 %
Calcium sulphate (CaSO ₄)	0,4 g/l	0,03 %	0,02 %	0,1 %

Demands for Salt Solutions in Germany (DIN EN 16811-2)					
		Real value	Limit value		
Arsenic (As)	< 0,1 mg/l	≤ 0,25 mg/l	Copper (Cu)	< 0,2 mg/l	≤ 0,50 mg/l
Lead (Pb)	< 0,4 mg/l	≤ 0,50 mg/l	Nickel (Ni)	< 0,2 mg/l	≤ 0,50 mg/l
Cadmium (Cd)	< 0,1 mg/l	≤ 0,20 mg/l	Mercury (Hg)	< 0,01 mg/l	≤ 0,05 mg/l
Chrome, total (Cr)	< 0,1 mg/l	≤ 0,50 mg/l	Zinc (Zn)	< 1,0 mg/l	≤ 2,0 mg/l
			Iron (Fe)	< 10 mg/l	not applicable

Physical Data

Density at 20 °C	Corresponds to	pH-value	Specific heat
1,32 g/cm ³	38 °Be	5,5 – 7	3,35 MJ / m ³ *K

Properties

Additive	no
Colour	clear, yellowish / brownish
Solubility	Brine with water in all ratios miscible

