

Solution of Magnesium Chloride Specification

Specification **S_{ES} 20 %**
Trade name Brine of Magnesium chloride
Formula MgCl₂

Chemical composition	Average		Concentration range	
	g/l	%	%	%
Magnesium chloride (MgCl ₂)	240 g/l	20,0 %	19 %	21 %
Potassium chloride (KCl)	1,1 g/l	0,1 %	0,05 %	0,15 %
Sodium chloride (NaCl)	2,8 g/l	0,2 %	0,1 %	0,3 %
Magnesium sulphate (MgSO ₄)	20,5 g/l	1,7 %	1,5 %	2,0 %
Calcium sulphate (CaSO ₄)	0,2 g/l	0,05 %	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
1,20 g/cm ³	24 °Be	5,5 – 7	3,63 MJ / m ³ *K

Properties

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

