

**Solution of Magnesium Chloride**  
Specification

**Specification** **S<sub>ES</sub> 25 %**  
**Trade name** Brine of Magnesium chloride  
**Formula** MgCl<sub>2</sub>

Chemical composition	Average		Concentration range	
	g/l	%	%	%
Magnesium chloride (MgCl <sub>2</sub> )	314 g/l	25,0 %	24 %	26 %
Potassium chloride (KCl)	1,4 g/l	0,1 %	0,05 %	0,2 %
Sodium chloride (NaCl)	3,6 g/l	0,3 %	0,2 %	0,4 %
Magnesium sulphate (MgSO <sub>4</sub> )	26,9 g/l	2,1 %	1,5 %	2,5 %
Calcium sulphate (CaSO <sub>4</sub> )	0,2 g/l	0,1 %	0,05 %	0,2 %

Demands for Salt Solutions in Germany (DIN EN 16811-2)					
	Real value	Limit value		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
1,25 g/cm <sup>3</sup>	29 °Be	5,5 – 7	3,52 MJ / m <sup>3</sup> *K

**Properties**

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

