MAGPANEL COMPOSITION: MgSO4 vs MgCl

When it comes to magnesium oxide boards, there are two basic formulations: MgSo4 (magnesium sulfate) and MgCl (magnesium chloride). MagPanel is magnesium sulfate (MgSo4) but we can also provide MgCl via special order.

Let's see how they compare in terms of composition, characteristics, and applications.

PANEL COMPOSITION

Magpanel MgSO4 (Sulfate)	MGO Boards MgCl (Chloride)
Magnesium oxide (56-58%)	Magnesium oxide (56-58%)
Perlite (3-4%)	Perlite (3-4%)
Fiberglass mesh (4-6%)	Fiberglass mesh (4-6%)
Wood fiber (5-6%)	Wood fiber (5-6%)
Phosphate (P04) (0.1-0.3%)	Phosphate (P04) (0.1-0.3%)
Dissolvable chloride content (1%)	Dissolvable chloride content (5%)
Magnesium sulfate (27-29%)	Magnesium chloride (27-29%)

There are two things to take note of when it comes to the composition of these two panels. First, the presence of magnesium sulfate vs. magnesium chloride and second, the level of dissolvable chloride content. As you can see in MgSo4, magnesium sulfate replaces the magnesium chloride in MgCl.

So, if you're not a chemist, you're probably wondering what that means. Simply put, the magnesium sulfate makes the MgSo4 panels incredibly water-resistant, by preventing moisture from absorbing back to the halogen in the board.

This contrasts with how magnesium oxide (MgCI) boards were produced in the past, which resulted in "weeping boards" and corrosion of metal fasteners. The next evolution of magnesium oxides boards is magnesium sulfate (MgSo4 aka MagPanel) boards.

Due to these advances in manufacturing, when you purchase MagPanel, you don't have to worry about "weeping boards."



MAGPANEL COMPOSITION: MgS04 vs MgCl

Despite slight compositional differences, MgSo4

PANEL CHARACTERISTICS

and MgCI panels have generally the same characteristics:

- Highly water-resistant
- Lightweight
- Non-combustible
- Highly mold/mildew-resistant
- Easy to install

- Heating isolation
- Sound reduction
- Incredibly stable
- Impact resistance
- Bending strength









PANEL APPLICATIONS

MagPanel has a wide variety of uses that apply to both MgSo4 and MgCl panels:

- Ceilings & walls
- Subflooring
- Tile backer
- Firewalls
- **Partitions**
- Structural sheathing (for wood/metal stud walls)

- Soffits
- **Fascias**
- Shaft liners
- Shower stall tile backer
- Substrates for insulated coating systems (stucco, EIFs, and direct-applied finish systems)