



Magnesium Aluminum  
Silicate (MAS)  
Hydroclassified  
USP/NF & CTFA

## MAGNABRITE® S

**General Description:** Highly purified, selected blend of white smectite clays supplied as small flakes to ease dispersion.

**Functional Use:** Stabilizing and suspending agent for cosmetic, toiletry and pharmaceutical formulations. Especially useful for acidic preparations. Magnabrite S has low acid demand and high acid compatibility.

**Purity:** This mineral is specially processed to control both purity and performance. Magnabrite S meets all requirements set forth by the USP XXIII/NF XVIII for Magnesium Aluminum Silicate, Type IA.

**Microbial Limits Plate Count:** Aerobic microbial plate count is typically 100 cfu/g. No presence of E. coli, S. aureus, Salmonella sp. or P. aeruginosa.

**Solubility:** Insoluble in water or alcohol; one gram of clay produces a surface area greater than 750 sq. meters when fully dispersed.

|                           |                               |                 |                       |
|---------------------------|-------------------------------|-----------------|-----------------------|
| <b>Brightness (G.E.):</b> | 78 minimum                    | <b>Texture:</b> | Soft, slippery        |
| <b>Acid Demand:</b>       | 4.0 pH max                    | <b>Odor:</b>    | None                  |
| <b>Moisture:</b>          | 8% maximum as shipped         | <b>Taste:</b>   | None                  |
| <b>Viscosity:</b>         | 225 - 600 cps. (at 5% solids) | <b>Color:</b>   | White to off-white    |
| <b>Al/Mg Ratio:</b>       | 0.5 - 1.2                     | <b>Density:</b> | 2.6 g/cm <sup>3</sup> |
| <b>pH:</b>                | 5% dispersion 9.0-10.0        |                 |                       |

**Dry Particle Size:** White flakes that are typically not larger than 20 mesh.

**Wet Particle Size:** Minimum 99.75% finer than 200 mesh (74 microns)  
Minimum 99.00% finer than 325 mesh (44 microns)

**Elemental Analysis:** Typical values listed are not to be construed as rigid specifications.

|                                |        |
|--------------------------------|--------|
| SiO <sub>2</sub>               | 70.89% |
| Al <sub>2</sub> O <sub>3</sub> | 10.32% |
| MgO                            | 9.17%  |
| Fe <sub>2</sub> O <sub>3</sub> | 1.53%  |
| CaO                            | 5.23%  |
| Na <sub>2</sub> O              | 1.07%  |
| K <sub>2</sub> O               | 0.76%  |
| LOI                            | 9.20%  |

All metals are expressed as oxides, which are complexed in the mineral.

**Packaging:** 4-ply poly-lined package in boxes, moisture resistant, 50 pound net.

