# Rheology Modifiers

## Typical Properties

| ***Specialty Clays of Distinction*** | Magnesium Aluminum Silicates | | | | | White Bentonite | | Bentonite |
|---|---|---|---|---|---|---|---|---|
| | Magnabrite | | | | | **Polargel** | | Volclay |
| **Form** | **S** | **F** | **HS** | **HV** | **K** | **NF** | **HV** | **NF-BC** |
| Hydro classified | ✚ | ✚ | | ✚ | ✚ | ✚ | ✚ | ✚ |
| Air classified | | | | | | | | ✚ |
| Flakes | ✚ | | ✚ | ✚ | ✚ | | | |
| Micronized Powder | ✚ | ✚ | ✚ | ✚ | ✚ | ✚ | ✚ | |
| Conformity | USP/NF | USP/NF | USP/NF | USP/NF | USP/NF | USP/NF | USP/NF | USP/NF |
| Typical Properties | | | | | | | | |
| pH Range of use | (5-10) | (5-10) | (3.5-13) | (5-13) | (3-13) | (4-12) | (4-12) | (4-12) |
| Classification* (INCI) | M.A.S | M.A.S | P.B. | M.A.S | M.A.S | P.B. | B | B |
| Density g/cm$^3$ | 0.89 | 0.89 | 0.90 | 0.91 | 0.95 | 0.88 | 0.88 | 0.93 |
| Al/Mg Ratio | 0.5-1.2 | 0.5-1.2 | 3.5-5.5 | 0.5-1.2 | 1.4-2.8 | 3.5-5.5 | 3.5-5.5 | 3.5-5.5 |
| Typical Level of Use | (1-3)% | (1-5)% | (2-5)% | (1-3)% | (1-3)% | (2-5)% | (0.5-2)% | (0.5-2)% |
| Brookfield Viscosity (cps) @ 60 rpm | 225-600 | 150-450 | 40-200 | 800-2,200 | 100-300 | 80-250 | 800-2400 | 50-300 |
| Dispersion | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% |

***Classifications**: **M.A.S.** = Magnesium Aluminum Silicate