Hybrid Clay (High Swelling Bentonite)

Hybrid Clay is high quality bentonite engineered to have high swellability and high viscosity by carefully selecting and controlling excellent quality materials. In regard to applications, Hybrid Clay exhibits outstanding performance "as a muddy water material (viscosity, water-blocking, suppressing separation in the muddy water shielding method," "as a mud additive in the pressurized mud and soil shielding method," and "as an impervious filler in the seepage control method." Further, Hybrid Clay is high swelling bentonite that can be diversified in various jacking methods (dense mud, muddy water, pressurized mud and soil).



Features of Hybrid Clay

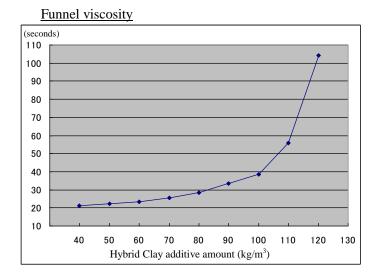
*High swelling and thickening performance along with excellent low dehydration performance. *Exhibits further viscosity and swellability with combined use together with a thickening agent such as TG-CELL and TG Gel.

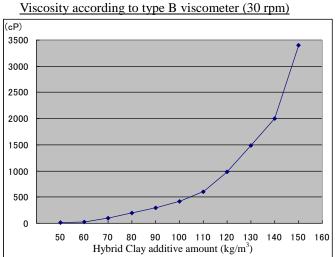
*Excellent running cost and excellent economic efficiency.

| SiO ₂ | AL ₂ O ₃ | Fe ₂ O ₃ | MgO | CaO | Na ₂ O | K ₂ O | Ig-Loss |
|------------------|--------------------------------|--------------------------------|-----|-----|-------------------|------------------|---------|
| 64.0 | 17.2 | 4.4 | 2.8 | 2.7 | 2.4 | 1.2 | 4.5 |

Chemical Composition of Hybrid Clay

Viscosity of Hybrid Clay





Properties of Hybrid Clay

| Appearance | Pale yellow powder |
|-----------------------|------------------------------------|
| True specific gravity | 2.6 ±1.0 |
| Bulk specific gravity | 0.55 - 0.85 |
| pH | 9.5 - 10.8 (2% dispersed solution) |
| Swellability | 20 ml/2g or more |
| Moisture content | 12% or less |

Applications of Hybrid Clay

| Shielding | Muddy water, slurry materials | |
|--------------------|--------------------------------------|------------------------------|
| Grouting | Water-blocking, tunnels, shielded | Hybrid Clay Packaging |
| | backing of sewage systems, etc. | * 25 kg bag |
| Auger construction | Various prefabricated piling methods | * 1 t flexible container bag |
| Blanketing | Artificial lakes | * 10 t tank lorry |
| Vegetation method | Embankment protection | To t tank forry |
| Seepage control | Impervious wall filler | |
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