

Bentonite



Bentonite is a clay consisting mainly of smectite minerals, commonly formed by decomposition of volcanic ash or tuff, or sometimes from other igneous or sedimentary rocks. Bentonite is a very plastic clay that shrinks (or swells) markedly in response to the removal (or addition) of water.

| Element | SiO ₂ | Al ₂ O ₃ | BaO | CaO | Fe ₂ O ₃ | K ₂ O | MgO | MnO | Na ₂ O | P ₂ O ₅ | SO ₃ | TiO ₂ | LOI |
|---------|------------------|--------------------------------|------|------|--------------------------------|------------------|------|------|-------------------|-------------------------------|-----------------|------------------|------|
| Unit | % | % | % | % | % | % | % | % | % | % | % | % | % |
| DL | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/05 | 0/01 |

| Element | 1h | 2h | 4h | 24h | Moisture | swelling index |
|---------|-----|-----|-----|-----|----------|----------------|
| Unit | % | % | % | % | % | % |
| DL | 0/1 | 0/1 | 0/1 | 0/1 | 0/1 | 0/1 |
| Method | WA | WA | WA | WA | WA | WA |

| Water Absorbtion | 540 | 610 | 680 | 760 | 5/88 | 30 |
|------------------|-----|-----|-----|-----|------|----|
|------------------|-----|-----|-----|-----|------|----|