

## LATERITE

Laterites are soil types rich in iron and aluminum, formed in hot and wet tropical areas. Nearly all laterites are rusty-red because of iron oxides. They develop by intensive and long-lasting weathering of the underlying parent rock. Tropical weathering (laterization) is a prolonged process of chemical weathering which produces a wide variety in the thickness, grade, chemistry and ore mineralogy of the resulting soils.

Laterites are a source of aluminum ore; the ore exists largely in clay minerals and the hydroxides, gibbsite, boehmite, and diaspore, which resembles the Composition of bauxite. a major source of iron and aluminum ores. Laterite ores also were the early major source of nickel.



### Composition:

| Chemicals                                 | Max. % |
|---|--------|
| Loss on Ignition                          | 12.99% |
| Silica as SiO <sub>2</sub>                | 16.57% |
| Iron as Fe <sub>2</sub> O <sub>3</sub>    | 49.90% |
| Alumina as Al <sub>2</sub> O <sub>3</sub> | 18.00% |
| Titanium as TiO <sub>2</sub>              | 1.84%  |

### Attributes:

- Rich in aluminum and iron
- Thick
- High density
- Hard
- Durable
- Percolates rain water
- Friable
- physically resistant

### Applications:

- Cement Industries
- Roads
- Bridges
- Construction
- Painting
- Cladding