# MetaStar® 501

### **Product Description**

Metastar®501 is a premium metakaolin produced by very carefully controlled calcination. It has been engineered with a high level of pozzolanic reactivity when used in portland cement-based concrete, plaster, and mortar. When MetaStar 501 metakaolin is used, it can react with the free lime by-product of portland

cement hydration to form cementitious calcium silicate and calcium aluminate products, which can result in overall improved durability.

Unlike other pozzolanic materials such as silica fume, fly ash, and blast-furnace slag, MetaStar 501 metakaolin will not darken white or gray cement-based applications. The use of this engineered metakaolin in mortar, cement, and plaster can increase chemical resistance, compressive and flexural strengths and

can reduce permeability. In addition, MetaStar 501 metakaolin can aid in reducing alkali silica reactions.

## **Application**

- Portland Cement-Based applications (e.g., concrete, grouting, and stucco)
- High Whiteness Type I Portland Cement-Based applications including swimming and pool plaster.

#### **TYPICAL PROPERTIES**

| Source           | Sandersville, GA |       |
|------------------|------------------|-------|
| Color            | White            |       |
| Brightness       | (GE % MgO)       | 86    |
| Particle Size    | (Median, μm)     | 1.2   |
| Specific Gravity | (g/cm³)          | 2.5   |
| рН               |                  | 4 - 6 |
| Moisture         | (wt.%)           | 1.0   |

#### **IMERYS Kaolin**

100 Mansell Court East Suite 300, Roswell, GA 30076 United States

Tel: +1 (770) 594 0660 Fax: +1 (770) 645 3384

Customer Service: Tel: +1 (888) 277 9636 Fax: +1 (770) 645 3631 www.imerys-kaolin.com

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