CLARENA® AC1100

Clay mitigating solution for aggregates

Product Description

CLARENA®AC1100 is a chemical additive specifically designed and formulated to meet the needs of the construction aggregate producer. Designed to selectively react with clay contaminants in both coarse and fine aggregates, this highly engineered, irreversible chemical reaction can eliminate the negative effect of clays in applications such as concrete, road base and asphalt.

Product Advantages

- Enhanced yield and productivity
- Reduced waste generation and cost of fines management
- Increased efficiency and space utilization
- Extension of reserves and use of currently marginal materials.
- Improves sand handling and flow properties by reducing sand clumping.

Benefits

The CLARENA®AC1100 chemistry unleashes productivity where typical equipment/mechanical processing technology has reached a practical limit. Most mechanical/equipment solutions separate process streams based on size. In the case of fine aggregate, where beneficial fines and clay contamination can be of similar size, equipment/mechanical separation does not distinguish between these materials and can be wasteful. CLARENA®AC1100 technology is based on chemically distinguishing between beneficial fines and clay contamination thereby allowing more efficient utilization.

Typical Properties

- **Physical state:** Liquid
- **Color:** Colorless to pale yellow
- **Specific gravity:** 1.1 – 1.2
- **pH:** 5 – 8
- **Freezing point:** 26°F (-3°C)
- **Storage temperature:** up to 100°F (38°C)
- **Shelf life:** 12 months

Typical Addition Rates

For most clays, addition of 1.1 - 8.8 lbs of chemical to 2,200 lbs of aggregate (0.5 – 4 kg/metric ton) will effectively eliminate the negative effects of clay contamination. These levels can vary due to the type of clay (mineralogy) and the level of contamination.

How to Use

CLARENA®AC1100 is designed to be used as received. Further dilution is not recommended unless exceptional circumstances exist at a given site. Please contact your local GCP representative.

Dosing Equipment

CLARENA®AC1100 should be proportioned through a calibrated dosing system suitable for the dosage and throughput at a given site. Recommended equipment designs are available from your local GCP representative.

Compatibility

Significant material and process variability can exist when producing construction materials such as concrete, road base or asphalt. The compatibility of treated sands should be verified in all end use applications.

Packaging

CLARENA®AC1100 is available in 1,100 kg Intermediate Bulk Containers (IBC) or in bulk tanker trucks. Please contact your local GCP representative if other packaging options are required.

Storage

CLARENA®AC1100 should be stored in a shaded area not exposed to direct sunlight. Should area's storage be exposed to freezing temperatures, provisions should be made for insulating and heating in order to prevent excess viscosity and to aid pumpability.

Health & Safety

All precautions defined on the SDS (Safety Data Sheet) must be followed at all times.

Technical Services

Field Engineers from GCP Applied Technologies are available to assist in laboratory and plant evaluations of CLARENA®AC1100. Please contact your local GCP representative for further assistance

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