

Clarena® CM150C

Clay mitigating admixture

DESCRIPTION

Clarena® CM150C is a clay mitigating admixture used in quarries. The Clarena® CM150C family of products is a new class of materials specifically designed and formulated to meet the needs of the concrete producer. It is designed to selectively react with clay contaminants in both coarse and fine aggregates. This highly engineered, irreversible chemical reaction can eliminate the negative effects of clay-bearing sands and aggregates in concrete. Even a relatively trace presence of clay in a concrete mix can have a two-fold negative impact.

Firstly, the mix will have a higher water demand due to the clay's absorbency. Normally, this increased water demand would be addressed through superplasticizing admixtures. However, the secondary negative impact of clay is its affinity for polycarboxylate (PCE) molecules, which diminishes the efficacy of PCE-based admixtures. Clarena® CM150C reacts with the clay particles, eliminating the PCE affinity, and enabling PCE-based admixtures to work with increased efficiency.

BENEFITS

- Allows higher use of manufactured sand in mix designs
- Uses clay bearing aggregates (natural and crushed) without compromising on concrete performance
- Increases use of lower-quality or clay contaminated aggregates
- Enhances concrete performance by reducing water and admixture requirements through the effective neutralization of clay particles

APPLICATION

- Sand and coarse aggregates

INDICATIVE INFORMATION

Product Nature	liquid
Color	Colourless to pale yellow
Lifetime	12 months
Specific gravity (kg)	1,140 ± 0,020
pH	6,50 ± 1,50

PACKAGING

- Bulk
- IBC 1000L
- 205 L Drum
- Pail

METHOD OF USE

Dosage :

The dosage rate of Clarena® CM150C is a direct function of the amount of clay contained within the specific aggregate of the concrete mix. For most clays, dosage of 1.0 to 3.0 L / Metric Ton of Clarena® CM150C to the aggregate 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. Clarena® CM150C should be administered by pre-dosing onto clay-containing sand or aggregates. Chryso can assist you in determining the appropriate dosage by testing your constituent materials to determine their clay content and calculating the appropriate dosage. Clarena® CM150C is designed to be used as received. Further dilution is not recommended unless exceptional circumstances exist at a given site.

Equipment :

Clarena® CM150C 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 Chryso representative.

PRECAUTIONS

- Clarena® CM150C 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 to prevent excess viscosity and to aid pumpability

SAFETY

Prior to any use, please read carefully the Safety Data Sheet (SDS).