Mica for Coatings, Wall finishes and building specialties

Mica is a natural silicate with different natural varieties and shows specific chemical structure, purity and colour. The use of Mica in coatings and wall finishes stems from its lamellar structure and its advantageous brightness.

Muscovite Mica is chemically inert. It is resistant against most acids, heat and oxidation. It is dissoluble in water and completely neutral. The importance of Muscovite Mica for the formulation of coatings and wall finishes is due to its distinctive lamellar structure. Modern processing techniques permit to conserve this structure during the production process and even lead to further refining. Muscovite Mica improves coatings and wall finishes by its specific functional characteristics.

The Muscovite Mica flakes bring themselves into line comparable to the structure of fish scales. Thus, they form an efficient water barrier for the system. This structure is the reason why - even given conditions of high humidity - Muscovite Mica improves the adhesive strength of the coating on the subgrade. Muscovite Mica increases the mechanical stability of the coating.

The manual application of coatings and wall finish systems containing Muscovite Mica is easily processible. The mica flakes serve as a lubricant. Spreading the coating regularly on the subgrade is thus alleviated by Muscovite Mica.

The main function of Muscovite Mica is, however, its armoring effect. The fillers used in coatings and wall finishes have mainly a granular, cubic

structure with a predetermined susceptibility to cracks. Thanks to its lamellar structure, Muscovite Mica is capable of correcting these cracks by bridging over, lapping over and bearing intermediately. Thus, the coating system is reinforced. In wall coatings of high PVC, Mica may reduce shine and provide a desired matting effect

In corrosion protection, Muscovite Mica provides good adhesion for the coating even on preoxidised surfaces. Heavily pigmented anti-corrosion paints tending to sedimentation effects due to their typical high density, they can easily be redispersed with Muscovite Mica . By adding Muscovite Mica to marine paints, the resistancy under water and at the water surface line are improved.
Muscovite Mica acts as a UV filter, which delays the degradation of the adhesive agent and untimely yellowing caused by sunbeams.

Being an essential component in adhesives, Muscovite Mica improves the adhesion on the substrate.

Muscovite Mica is being regularly used in numerous applications outside coatings and masonry products. In these technical applications, the specific properties of the lamellar mineral used in various particle size ranges play an important role in formulation.

Muscovite Micas are mined mostly underground. A comprehensive refining separates the mica flakes from inactive substances. The obtained purity is the reason for the low apparent density of Muscovite Mica. Classification, grinding and micronisation processes lead to a range of various standard types with specific granulometry and powder fineness. While keeping up a high aspect ratio, the Muscovite Mica flakes are partly delaminated while being ground and micronised.

A wide range of quality controls of our quality assurance system during all stages of production makes sure that product constancy is realised.

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