

Mystox CTB Series – antimicrobials for polymer-coated textiles

Textiles coated with plasticized PVC film can be attacked by micro-organisms, especially fungi. The fungi use the plasticizer and other ingredients in the PVC film as a food source.

Fungal attack has a number of serious consequences, including discolouration of the coating, tackiness and subsequent embrittlement of the film. These effects will both reduce the service life and impair the visual appearance of the coated textile.

In general, fungal organisms are predominantly responsible for microbial attack on PVC coated fabrics. Damage to the coating can be caused:

- directly by attack of the organisms on the ingredients of the coating, e.g. plasticizers
- indirectly by the fungi producing extracellular pigments which migrate into the coating, causing permanent discolouration, usually black or green in colour

DESCRIPTION

Prevention of microbial attack and its damaging effects can be achieved by incorporating a product from the Mystox CTB Series into the PVC at the processing stage. The use of Mystox CTB will provide long-term protection against micro-organisms, helping to prevent surface growth, permanent staining, embrittlement of the coating and premature product failure. Mystox CTB contains a synergistic combination of biocides contained in a non-volatile plasticizer carrier. These biocides have a wide spectrum of anti-microbial activity and an extensive track record in protecting biologically-susceptible coatings. Mystox CTB is suitable for the protection of PVC coated textiles used in outdoor structures such as tents, marquees and tarpaulins.

Three products are available in the range:

Mystox CTB - DOP: based on di-octylphthalate

Mystox CTB - DINP: based on di-isononylphthalate

Mystox CTB - DIDP: based on di-isodecylphthalate

APPLICATION

Mystox CTB products are free-flowing liquids and can be readily incorporated into the PVC formulation at the mixing and compounding stage without any effect on the processing or heat stability characteristics. The product should be used at an addition level of 1.5% Mystox CTB on the weight of coating mix.

Mystox CTB can be conveniently incorporated into the coating formulation during the mixing or compounding process. The product is incorporated into the polymer compound by substituting the required level (1.5%) for an equal amount of the plasticizer or polyol.

HANDLING

As with most chemicals, reasonable care should be taken in handling Mystox CTB. Gloves should be worn and any contaminated skin washed thoroughly. For additional information see product Safety Data Sheet.