

## INSTASCAN NDT COATING SYSTEM

A two-part coating system that will change color with changes in surface temperature originally developed for Non-Destructive Testing (NDT) of large area composite, laminated and honeycomb structures:

- Part #8202DA, Black Base Coat
- Part #8202DB, Liquid Crystal Coat

### **Black Base Coat #8202DA**

Instascan #8202DA is a black water-based pigmented coating designed for use as an undercoat to enhance adhesion and intensify the thermal response (color change properties) of the liquid crystal coat (#8202DB), which is applied over it.

Application can be by brushing, roller-coating or spraying using hand or automated equipment. Ideally, the coating should be applied uniformly to completely cover the test surface. It can be thinned by adding distilled water and mixing well. Removal can be accomplished easily by washing with water and mild detergents.

### **Liquid Crystal Coat #8202DB**

Instascan #8202DB is a temperature-sensitive water-based coating containing a microencapsulated cholesteric liquid crystal mixture with a color play response in the temperature range of 32-35°C (R32C3W). It is designed to be applied as an overcoat on top of the black base coat #8202DA. #8202DB also contains black pigment.

Application can, again, be by brushing, roller-coating or spraying using hand or automated equipment. #8202DB can also be thinned by adding distilled water followed by thorough mixing. For optimum color response the coating should be applied uniformly and in sufficient amounts to give a dry film thickness of approximately 2 mils (50 microns). This is equivalent to coverage of approximately 2.5 - 5.0 m<sup>2</sup> per KG (100 - 200 ft<sup>2</sup> per US gallon). #8202DB can be removed by washing with water under pressure. Detergents can be added to the water to enhance clean-up.