

METALLIC BRILLIANT REFLECTIVE SURFACE POWDER COATING

Mirror Silver Series 49/91260 | Chrome OGF Series 49/91312 | Kromezone Series 49/95001

This document is intended as a supplement to TIGER Drylac® Technical Information Sheet Version 00-1004 'Metallic effect powder coatings' which provides guidance on metallic effect powder coating general processing. TIGER Drylac® Mirror Silver Series 49/91260, Chrome OGF Series 49/91312 and Kromezone Series 49/95001 are high performance products with very good smoothness and reflective surfaces. To ensure the benefits of these products are fully achieved, additional steps are required.

The extreme brilliance of this type of powder coating relies on the high flow and good smoothness of the base powder coating and the perfect alignment of the metallic particles at the surface. Cleanliness of the substrate is very critical; any substrate surface imperfections as well as impurities and metal shaving will be very visible. Low levels of contamination by other powder coatings can produce voids in the coating film that will be visible as dark spots, usually the size of a pin head. Substrate surface impurities will appear as noticeable protrusions.

TIGER Drylac® Mirror Silver Series 49/91260, Chrome OGF Series 49/91312 and Kromezone Series 49/95001 require a clear top coat in order to protect the thin layer of aluminum flakes.

Experience has shown that it is important to observe the following:

- film thickness of these products should be between 2.5-3.5 mils (60-80 µm). If the film thickness is higher, the finish may become a bit smoother, yet there is a possibility of sagging and cracks may occur in the metallic layer. If the film thickness gets much lower than the minimum, smoothness will be greatly compromised
- it is usually recommended for two-coat systems to use a 5-minute at 392 °F (200 °C) gel cycle, followed by application of the clear top coat and a full cure cycle. For TIGER Drylac® Mirror Silver Series 49/91260, Chrome OGF Series 49/91312 and Kromezone Series 49/95001 a 10-minute at 392 °F (200 °C) schedule is recommended to fully set the coating and avoid the appearance of small dark cracks (the recommended curing time refers to substrate temperature)
- when spraying electrostatically, the voltage on the gun should not be too high or else dark spots may appear on the coating
- best results are achieved by using TIGER Drylac® Clear Series 38/00001 as a clear top coat. The film thickness should be kept low, around 2.5 mils (60 µm). Recommended cure time for TIGER Drylac® Clear Series 38/00001 is 15-minutes at 392 °F (200 °C) substrate temperature

By following these simple steps, the applicator should be able to realize the best possible appearance these products provide.