

SERIES 69 – chemical agent resistant coating (CARC)

EPOXY BASED ZINC-FREE POWDER COATING DESIGNED TO BE USED AS ONE COAT OR AS A PRIMER IN TWO-COAT SYSTEM FOR CARC APPLICATIONS WITH SUPERIOR CORROSION PROTECTION. COMPLIANT TO MIL-PRF-32348 TYPE I AND II

Typical applications

- heavy corrosion protection
- steel/aluminum constructions
- military equipment

Product details

- Standard packaging** in original 55 lb (25 kg) boxes and 5 lb (2.5 kg) minipack
- Specific gravity (ASTM D792)** approximately 1.6 g/cm³ depending on pigmentation
- Theoretical coverage** at 2.5 mils (60 µm) film thickness: **51.5 ft²/lb (11.1 m²/kg)**. Refer also to "Theoretic Powder Coating Coverage Chart" version 00-1001 (imperial) version 00-1000 (metric)
- Storage stability** 6 months at no more than 77 °F (25 °C) avoid direct and extended exposure to heat

Features

- especially suited for blasted substrates
- very good corrosion protection
- very good mechanical properties
- good chemical resistance
- good storage stability
- very good edge coverage

Finish

finish	gloss
smooth <i>semi-gloss</i>	40±5*

* Gloss level according to ASTM 523 at 60° angle (doesn't apply to metallic effect powder coatings). The measured gloss level of effect powder coatings can diverge from the details given in this Product Data Sheet. The creation of tolerance samples is recommended.

Available as Type I coatings, MIL-PRF-32348 approved:

product description	product ID
White Fed Std 27875 QPL Q2044	69/70369

Available as Type II coatings, MIL-PRF-32348 approved:

product description	product ID
Gloss White Fed Std 17925 QPL Q2159	569/10101
Gray Fed Std 26622 QPL Q2155	569/71402
Seafoam Green Fed Std 24533 QPL Q2156	569/51401
Green Fed Std 24094 QPL Q2157	569/50201
Tan Fed Std 23446 QPL Q2158	569/15201

Can be made to order in non-stock colors (minimum order quantity applies).

Pretreatment

Refer to TT-C-490 for ferrous substrates and TT-C-490/MIL-C-5541F for non-ferrous substrates.

Processing

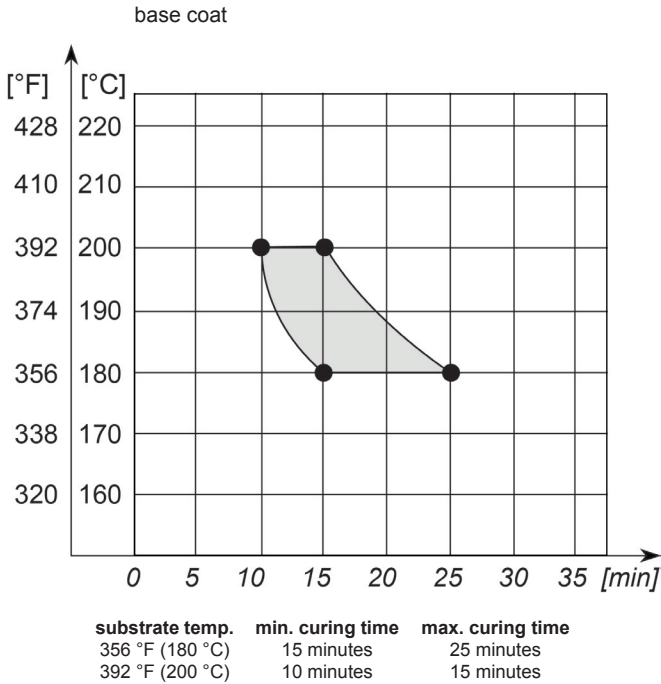
Corona and Tribostatic*

* For Tribostatic powder coatings, confirm before ordering. Suitability of metallic effects for Tribostatic processing must be verified prior to actual application. Please refer to the latest edition of the relevant application guidelines for metallic effect powder coatings.

Since not all powder coatings are suitable for recycling/reclaim, please verify before ordering.

Cure parameters

(substrate temperature versus curing time)



Cure parameters must be closely observed since mechanical properties will develop before full cross-linking.

Film thickness

For best results, when used as primer the minimum film thickness should be <2.5 mil (60 µm) prior to top coating.

Test results

Results are checked on a 1/8 inch (3 mm) gauge zinc phosphated, steel panel. Cure conditions according to the cure curves.

test method	test	Series 69 smooth glossy
ISO 2360	recommended film thickness	2.5-3.5 mils (60-80 µm)
ASTM D3359 method B	cross cut tape test 1mm cutting distance	5B
ASTM D2247	determination of resistance to humidity 1,000 hours	maximum undercutting 1/32 inch (1 mm), no blistering
ASTM B117	salt spray resistance 3,000 hours	maximum undercutting 1/32 inch (1 mm), no blistering
ASTM D3258	porosity of paint film	non-porous

Cleaning recommendations: refer to the latest edition of TIGER "Cleaning Recommendations" information sheet, Version 00-1005.

Please note

Post-bending properties of any part must be verified prior to application. Minor cracks in the coated surface may lead to corrosion.

Joint sealants and any other auxiliary products, such as glazing aids, gliding waxes, drilling and cutting lubricants, which come in contact with the coated surface, must be pH-neutral and free of substances that may damage the finish. Therefore, a suitability test at the applicator's end, prior to coating, is highly recommended.

Any post mechanical processing of already coated parts, such as sawing, drilling, milling, cutting and bending will result in damage of the coated surface and will subsequently weaken the corrosion protection.

In general, colors in the red, orange and yellow range may require an increased film thickness to achieve full hiding.

Please read and understand the Safety Data Sheet (SDS) before use.

Chemical resistance

The required chemical resistance of a powder coating depends, among other things, on its formulation. Chemical resistance requirements must be considered according to processing conditions and final use of the finished product. This is best established during the product specification process. Agreement between all parties involved must be reached about the requirements for such chemical resistance as well as the test method, which may be performed in accordance with PCI test method #8 "Solvent Cure Test". Furthermore, the test duration and concentration of the test media need to be agreed upon.

Disclaimer

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