

SERIES 49 - transparent, candy tone and glitter

POLYESTER TGIC TRANSPARENT OR SEMI TRANSPARENT WEATHER RESISTANT POWDER COATING FOR INTERIOR AND EXTERIOR APPLICATIONS

Typical applications

- top coat for TIGER Drylac metallic powder coatings
- brass and chrome substrates

Product details

Standard packaging in original 20 kg (44 lb) box and 2.5 kg (5 lb) minipack

Specific gravity (ASTM D792) approximately 1.2-1.8 g/cm³ depending on pigmentation

Theoretical coverage at 60 µm (2.5 mils) film thickness: **11.1 m²/kg (51.5 ft²/lb)**. Refer also to "Theoretic Powder Coating Coverage Chart" version 00-1000 (metric) version 00-1001 (imperial)

Storage stability 12 months at no more than 25 °C (77 °F) avoid direct and extended exposure to heat

Features

- Underwriter Laboratories recognized component (UL approved)



Underwriters Laboratories Inc., (UL) Recognition.

product description	product ID
Transparent Gold	49/20170
Transparent Brass	49/20180
Transparent Copper	49/63130
Transparent Red	49/35810
Transparent Blue	49/46110
Transparent Green	49/55730
Transparent Black Smoke	49/80375
Candy Raspberry	49/31570
Candy Red	49/35810
Candy Purple	49/41480
Candy Teal	49/42130
Candy Blue	49/43600
Candy Lime Green	49/54810
Candy Carina	49/20180
Candy Nunavut	49/03001
Candy Zokuna	49/00106

For further information on this product, refer to TIGER Drylac® Series 49 Product Data Sheet for interior and exterior applications.

Finish

finish	gloss [†]
clear - smooth <i>glossy</i>	80-90+*
clear - smooth <i>semi-gloss</i>	50-60*
glitter - smooth <i>glossy</i>	80-90*
transparent and candy tone smooth <i>glossy</i>	80-90*

[†]Some gloss levels may vary. Please consult individual Technical Data Sheets for specific gloss levels.

* 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 stock product in a selection of colours and finishes (see table and colour charts).

Pretreatment

The following table reflects the common methods of pre-treatment with regards to various substrates and applications. In selecting the proper type of pretreatment, the suitability of the type of powder coating for a desired application according to the guidelines on this page should be observed.

	Aluminum			Galvanized Steel			Steel		
Degreasing	○			○			○		
¹ Chromating	○	○	○	○	○	○			
² Pre-Anodizing	○	○	○						
² Chrome free	○	○	○	○	○				
Iron Phosphating							○		
Zinc Phosphating				○	○	○	○	○	○
Blasting							○	○	○
³ Sweeping				○	○	○			
	I	E	A	I	E	A	S	I	E S ⁴

Application:

I = interior; E = exterior; A = architectural; S = steel

¹ according to ASTM B 449

² according to GSB quality and test regulations. The suitability of this type of pretreatment needs to be established through a boiling water test and subsequent cross-hatch adhesion and adhesive tape removal test

³ only for zinc coated parts >45 µm (>1.8 mils)

⁴ for a two-coat process/TIGER Shield

Processing

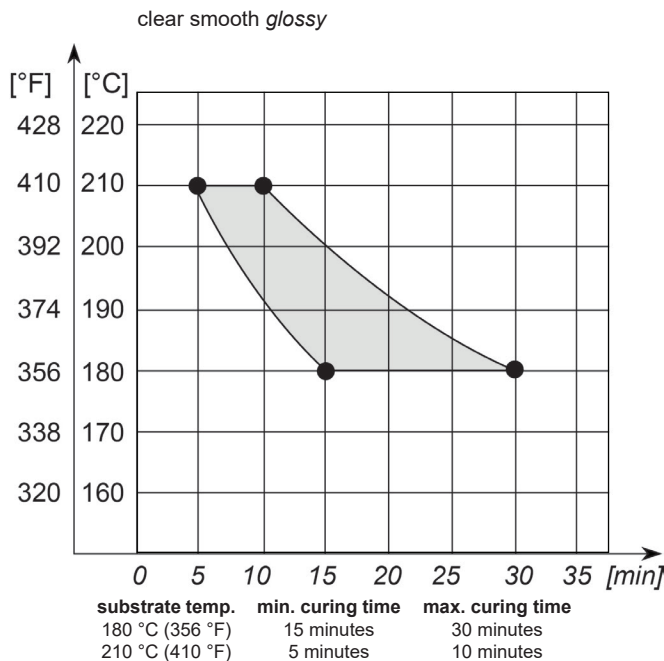
Corona and Tribostatic*

* 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.

Test results

Checked under laboratory conditions on iron phosphated steel test panels Bonderite B-1000 or equivalent. Cure conditions are according to the cure curves. Actual product performance may vary due to product-specific properties such as gloss, colour, effect and finish as well as application-related and environmental influences. When used as a two-coat system, the increase in film thickness will result in a decrease of mechanical properties.

test method	test	Series 49 clear smooth <i>glossy</i>	Series 49 transparent and candy tone	Series 49 glitter
ISO 2360	recommended film thickness	60-80 µm (2.5-3.5 mils)	60-80 µm (2.5-3.5 mils)	60-80 µm (2.5-3.5 mils)
ASTM D523	gloss - 60°	80-90+	80-90	50-60
ASTM D3359 method B	cross cut tape test 1mm cutting distance	5B	5B	5B
ASTM D2794	ball impact test cracking of coating	20 in/lb no appearance of cracks down to the substrate	20 in/lb no appearance of cracks down to the substrate	20 in/lb no appearance of cracks down to the substrate
ASTM D3363	pencil hardness	H minimum	H minimum	H minimum
ASTM D2247	determination of resistance to humidity 500 hours	maximum undercutting 1 mm (1/32 inch), no blistering	maximum undercutting 1 mm (1/32 inch), no blistering	maximum undercutting 1 mm (1/32 inch), no blistering
ASTM B117	salt spray resistance 500 hours	maximum undercutting 1 mm (1/32 inch), no blistering	maximum undercutting 1 mm (1/32 inch), no blistering	maximum undercutting 1 mm (1/32 inch), no blistering

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

Please note

Due to the transparency of Transparent and Candy Tones powder coatings, the appearance of the finished product depends on the finish of the substrate. Optional substrates are nickel, chrome and brushed aluminum. Alternatively Kromezone TIGER Drylac® 49/95001 and Sparkle Silver TIGER Drylac® 49/90450 can be used as base coats as an alternative to a specified substrate.

It is the responsibility of the buyer/applicator to determine whether the UV stability of the TIGER Drylac® Series 49 Transparent and Candy Tones powder coating is appropriate for the intended end use. Due to the inherent limitations of pigments used to generate the Transparent and Candy effects, the UV stability is reduced in comparison to standard opaque colours, such as the RAL range. This reduction can vary from colour to colour.

For metallic finishes, it is recommended to observe the guidelines published in the latest edition of TIGER Drylac® "Application guidelines for metallic effect powder coatings".

Please consult the manufacturer before applying any 2-coat systems that feature (i) a primer or e-coat as base coat and (ii) a metallic effect powder coating as a top coat.

Top coating with a clear exterior grade powder coating over an interior grade powder coating does not result into a weather resistant coating system.

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.

In general, colours 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

TIGER's verbal and written recommendations for the use of its products are based upon experience and in accordance with current technological standards. These are provided in order to support the buyer or user. They are non-committal and do not create any additional commitments to the purchase agreement. They do not release the buyer from verifying the suitability of TIGER products for the intended application. TIGER warrants that its products are free of flaws and defects to the extent stipulated in the Terms of Delivery and Payment.

As part of TIGER product information program, each Product Data Sheet is updated periodically. The latest version shall prevail. It is recommended to always check for the latest editions on TIGER's website download area www.tiger-coatings.com to make sure you have the most current version of this Product Data Sheet. The information on TIGER's Product Data Sheets are subject to change without notification.

This Product Data Sheet supersedes and replaces all previous Product Data Sheet versions and notes to customers published in relation to this product and is only intended to provide a general overview on the product.

Latest versions of Technical Information Sheets and Terms of Delivery and Payment are downloadable from www.tiger-coatings.com and form an integral part of this Product Data Sheet.

Certified according to
ISO 9001 | 14001

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