

ACRYVER SEMI-GLOSSY DTM HS

Series 1779

DTM semi-glossy, acrylpolyurethane enamel for metal, light alloys, galvanized steel and cementitious flooring for outdoor



TECHNICAL FEATURES

HS (High Solid), DTM semi-glossy, acrylpolyurethane enamel for metal, light alloys and galvanized steel metal. Product formulated with particular hydroxylated acrylic resins and aliphatic polyisocyanates. The presence of special corrosion inhibitors gives the product a high anticorrosive resistance. Enamel particularly characterized by excellent resistance to the outside, good anticorrosive power on iron and excellent adhesion to galvanized sheet, as well as rapid drying. The product can also be applied on cement-based substrates intended for outdoor use, to create a colored, anti-dust, thin film coating. The product can also be applied on outdoor cement substrates, as colored, thin-film thickness, anti-dust product. The product has been tested according to the Ministerial Decree 236/89 relating to the BCRA method which determinates the coefficient of the dynamic friction in order to verify the resistance to slipperiness on the cement supports.

APPLICATION FIELD

Polyacrylic enamel direct to metal, ideal as semi-glossy base coat with good anticorrosive properties for metal substrates in those cases in which it is intended to shorten coating times. Ideal for painting robotics, industrial automation, parts and components of the Ace sector where high productivity and speed of handling of the painted products are required. It can also be applied to outdoor concrete floors.

GENERAL INFORMATION

System: Two pack - 2K

Nature: Solvent-based

Packages: 3,3 kg - 17 kg

Tinting Service: Tinting service with solvent-based colorants Series 0615

Suitable Substrates: Iron, Cast iron, Galvanized surfaces, Light alloys, Aluminum, Thermoplastics (abs, pvc, pc), Fiberglass and Thermosetting plastics, Cement, Sandblasted Iron - Sandblasting Sa 1-2, Sandblasted Iron - Sandblasting Sa 2,5-3, Hot-dip galvanization

Color fans and color cards: Ral 841 GL, Ral Design, Ncs 1950, ColoradoMix 1040, Colorado Box 2.0

SUBSTRATE PREPARATION

The surface pre-treatment process, to be carried out prior to the application of the coating product, is of considerable importance in order to obtain and guarantee optimal and long-lasting results and performance over time. The substrate must be perfectly clean, dry, degreased and free from rust and/or calamine. It is also advisable to make sure that the substrate is free from particles and other paints that are not perfectly adherent or incompatible with the coating of paint that will be applied. For the purpose of a correct and complete preparation, it is recommended to consult, where necessary, the explanatory notes attached to the technical data sheet, the painting manual and the technical assistance service of the Research & Development Laboratory. The explanatory notes, specifically, depending on the type of surface and the result to be obtained, indicate different pre-treatment methods such as degreasing, manual and mechanical cleaning using special equipment, mechanical preparations (scraping, sanding, tapping, brushing), light or accurate sandblasting, shot blasting, shot peening and wet sandblasting (or hydro sandblasting).

APPLICATION

Application conditions

The application of the coating product is subject to various factors such as environmental conditions (among which it is necessary to mention temperature, humidity and ventilation), geometry and laboriousness of the products to be painted, surface profiles and thicknesses to be applied. The application system to be used is of particular importance as, depending on the type of system, various parameters may vary including the transfer efficiency of the coating product, the overspray, the aesthetic appearance obtained, the sagging stability of the product and the ease or complexity of application. For these reasons, prior to applications on systems and lines of considerable scope, it is advisable to contact the technical assistance service in order to carry out the inspection and the necessary surveys for a consultancy activity relating to the application methods and the definition of ad hoc technical details on the plant in question.

EQUIPMENT	VISCOSITY	NOOZLE	PRESSURE	NOTES
AIRBRUSH - CUP GUN	25" - 45" Ford Cup 4	1,4 - 1,7 mm	3,5 - 4 bar	-
AIRMIX	Depending on application parameters	11 - 13	60 - 100 bar	-
ROLLER	-	-	-	5% with PUR Thinner Series 0988
ELECTROSTATIC	-	-	-	Contact technical assistance to decide the suitable antistatic additive

ACRYVER SEMI-GLOSSY DTM HS Series 1779

CATALYSIS

SERIES	HARDENER	CATALYSIS	USE	POT LIFE AT 20°C	PACKAGE
0929	PUR ALIPHATIC HARDENER	30% by weight (100 + 30)	Non yellowing for outdoor use	3 hours	1 l - 5 kg
1392	HS PLUS 420 HARDENER	15% by weight (100 + 15) or 4:1 by volume	For catalysis by volume and for roller applications on concrete	3 hours	1 l - 2,5 l

ENVIRONMENTAL CONDITIONS



ENVIRONMENT
TEMPERATURE

5°C - 35°C



SUBSTRATE
TEMPERATURE

5°C - 35°C



RELATIVE
HUMIDITY

60 %



SHELF LIFE

Store 2 years in original sealed packaging
at +5/+35°C.

TECHNICAL DATA



THEORETICAL
AVERAGE
SPREADING RATE

7,3 m²/kg
each coat at the
dry film thickness
of 50 µ



APPLICATION

Spray, Roller



DILUTION

5-10% with
PUR Thinner
Series 0988



GLOSS

50 - 60 gloss



WET FILM
THICKNESS
EACH COAT

110 µ



DRY FILM
THICKNESS
EACH COAT

50 µ



N° OF COATS

1 or 2 coats to
achieve the total
desired thickness



TOTAL DRY FILM
THICKNESS

90 µ



THEORETICAL
AVERAGE
CONSUMPTION

137 g/m²

DRYING



OVERCOATING
INTERVAL

4 - 96 hours
(after it is
necessary to
sand)



AIR DRYING

20°C



DUST-FREE
DRYING

20 - 30 minutes



DRY TO TOUCH

1 - 2 hours



DRY THROUGH

24 - 36 hours



FULL CURE

14 days



FLASH OFF

5 - 10 minutes at
20°C



STOVING DRYING

30 minutes at
50°C - 60°C



RESISTANCE TO
TEMPERATURE

80°C short
temperature leap at
100°C - 120°C

ACRYVER SEMI-GLOSSY DTM HS Series 1779

WARNINGS AND RECOMMENDATIONS

- Being a Direct To Metal product, it does not require prior application with a suitable primer.
- The degree of gloss can be influenced by the chosen color and the thickness applied. Unlike glossy final coat, resistance to scratching and polishing is lower.
- The use of nitro thinners for the application of polyurethane systems can create pitting phenomena on the surface of the dried film. Furthermore, the presence of partially reactive solvents can give rise to undesired reactions, reducing the aesthetic and mechanical characteristics of the system. The choice of unsuitable regenerated diluents can create problems of color change, product sedimentation and less effectiveness in reducing viscosity.
- The product is limitedly resistant to solvents generally intended as temporary contact and limited in time.
- The product can be applied directly, without the aid of a primer, only in the presence of not extremely shiny and new galvanized steel.
- The color match is evaluated after the application and drying of the product. It is recommended to carry out practical tests, such as spreading or applying the colored product on small surfaces made of suitable material, before proceeding with the product painting.
- After having colored the product with the suitable colorants, mix it in a short time.
- In order not to incur financial penalties, after having colored a product with tinting machine, send the MSDS and apply the appropriate legal labelling printable using the Databook P&C tinting software.
- For colored products with low opacity with a single coat DTM (yellow, orange, red) to check the shade, apply two coats of 100 μ w.f.t. of the product.
- Shelf Life Component B: the shelf life of the hardener used with Component A is 12 months.
- The product is suitable for new and already coated, but smooth cementitious floors. The product grants: ease of cleaning, anti-dust properties, moderate mechanical resistance. Considering it is a thin film coating system (<300 microns), perfect impermeability and chemical resistance are not guaranteed. For the preparation of the substrate, which must be perfectly cured (over 4 months), it is necessary to sand or smooth the surface, remove the old, 1 K paints and any eventual flaking or peeling parts from the floor. If it is not possible to carry out the treatment described above, accurately wash the floor with an acid solution consisting of 1 part of muriatic acid and 9 parts of water, leave it to act until complete reaction and rinse thoroughly with water. Before painting, wait for the complete drying.
- The coating system for concrete floors provides for the application of a first coat of solvent-based fixative impregnating agent Ancor-Fix Serie 8231 or water-based fixative impregnating agent AquaFixer Serie 8200 as required by the Franchi&Kim product range for floors. 12 hours after impregnating the cement substrate, apply two coats of product, catalysed at 15% in weight with HS PLUS 420 HARDENER Series 1392, spaced out for at least 8 hours. For the cleaning and the routine maintenance, it is recommended to use suitable detergents and always carry out a preventive test to check the compatibility of the detergent with the coating.
- To obtain an anti-skid effect in compliance with the Italian Ministerial Decree 236-89 Ref. B.C.R., add component A with 5% of Antiskid Additive Series 0851; the mixing must be carried out with an electric stirrer with motor speed at 300-400 rpm. Then catalyse the product following the instructions of the technical data sheet.
- For roller applications (short hair), it is recommended to use the HS Plus 420 Hardener Series 1392 with a catalysis ratio by weight at 15% (100 + 15) and with Unithinner Pur Slow Series 1507. The product catalyzed with 1392 is out of touch after 5-6 hours, and dry in depth after 36 - 48 hours.
- This product can be applied by roller and brush on metal supports only for small areas and portions of the product to be painted and, above all, for maintenance purposes and with moderate needs and expectations in relation to the final aesthetic aspect.
- Walkability parameters and overcoating interval for applications on cementitious floors: at 10°C walkable in 3 days and complete film hardening after 10 days; at 20°C walkable in 2 days complete film hardening after 7 days; at 30°C walkable in 2 days and complete film hardening after 6 days. In order to obtain such performances, the coatings must be applied in compliance with the application intervals defined according to the temperature: at 10°C the interval between the first and second coat must be 20 hours; at 20°C the interval must be 8 hours; at 30°C, the interval must be 6 hours.
- Apply the second coat after 8 hours and not later than 3 days at temperatures of 20°C.
- For floors subject to the parking of vehicles with new tires, it is recommended to carry out a preliminary test to exclude the formation of stains caused by the tire blend. The phenomenon is more evident with light colors.
- The full chemical resistance is reached at 20°C - 30°C after 10-15 days.

WALKABILITY AND VEHICLE ACCESSIBILITY

TEMPERATURE °C	OVER-COATABLE AFTER	WALKABLE AFTER	VEHICLE ACCESSIBLE AFTER
+ 10°C	20 hours	3 days	10 days
+ 20°C	8 hours	2 days	7 days
+ 30°C	6 hours	2 days	6 days

ACRYVER SEMI-GLOSSY DTM HS Series 1779

SUPPLY TECHNICAL DATA

Composition: Hydroxylated acrylic

Reference color: White

% solid content by weight: $67 \pm 2\%$

% solid content by volume: $50 \pm 2\%$

VOC: 448 ± 2 g/l

VOS: $33 \pm 2\%$

PARAMETER	DATA	TEST METHOD
SPECIFIC WEIGHT	1,15 - 1,3 g/ml	ISCOL 2
GLOSS	50 - 60 gloss 60°	ISCOL 6
VISCOSITY	2500 - 3500 mPa.s (20°C) Rod 3 Speed 50	ISCOL 1

MIXING RATIO A+B

Specific weight after catalysis (A+B): $1,23 \pm 0,05$ g/ml

% solid content by weight (A+B): $60 \pm 2\%$

% solid content by volume (A+B): $45 \pm 2\%$

VOC (A+B): 495 ± 2 g/l

VOS (A+B): $40 \pm 2\%$

METHOD	0929	1392
A+B BY WEIGHT	100 + 30	100 + 15
A+B BY VOLUME	100 + 40	4:1

TINTING SERVICE

BASE	BASE PACKAGING	COLORED PACKAGING	% MIXING RATIO
BINDER	2,47 kg 12,75 kg	3,3 kg 17 kg	75 - 25
WHITE BASE	16,15 kg	17 kg	95 - 5

CERTIFICATIONS



BCRA
Determination of slipperiness

Slip resistance test - British Ceramic Research Association method
Ministeria Decree n. 236 dtd 14th June 1989 - BCRA reference method

ACRYVER SEMI-GLOSSY DTM HS Series 1779

NOTES

Cleaning tools: At the end of the application, carefully wash the spray guns, the painting systems and the containers with a suitable thinner and store the tools dry to avoid encrustations.

Sanitary labelling: Handle the product with care. Make reference to the MSDS and respect the national and local regulations in force concerning personal and environmental safety.

Additional notes:

- The spreading rates are theoretical, indicative and intended per coat as they can be influenced by the color and the application system. Practical application test is suggested.
- The data reported in this data sheet have been obtained using only Franchi&Kim production materials (coatings, hardeners, thinners) applied in accordance with the specifications described. The improper use of thinners and/or hardeners, other than those mentioned or not manufactured by Franchi&Kim, can compromise application features, performances and final curing of the product. Therefore, in case of mixed coating systems with Franchi&Kim and other brand products, the conformity of the results with the parameters indicated in the technical data sheet cannot be granted.
- All times indicated in the drying section are to be intended at the temperature of 20°C, unless otherwise specified.
- The gloss indicated and tested may change during the application phase because it can be influenced by the following factors: realized color, thickness, number of coats, environmental conditions, thinner and hardener used if different from those established in the technical data sheet.
- The data relating to section catalysis ratio A+B are to be considered referring only to the first recommended catalyst.
- Pot Life times have been defined at the temperature of 20°C, therefore higher or lower temperatures, hardeners, environmental conditions and humidity different from the standard can influence in defect or in excess the duration of the Pot Life.

The information contained in this technical document is correct and accurate to the best of our knowledge, and should therefore be considered reliable. In any case, they cannot imply a guarantee on our part, as certain factors such as the preparation of the product and the substrate, the conditions of use, application, drying and overcoating, as well as the state of conservation of the products, are outside our strict control. It is responsibility of the user to verify the suitability of the products for the specific use, as well as the correct and precise execution of the work in accordance with the content of the technical data sheet, the recommended coating system and preparation of the support. For further information regarding the method of application and conditions of use, it is recommended to contact our technical support service. It should be noted that the packaging image could have a placeholder purpose and could therefore be an indicative reference. The packages indicated may vary according to the additions or changes of the annual price lists. This document replaces all previous versions. In any case, it is advisable to refer to the annexes with the explanatory notes to better understand and deepen the parameters of the technical data sheet. The updated edition, available on the website www.franchi-kim.com in the section technical data sheets of the download area is to be considered the only ones to consult as reference.

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