

**Silhouette Paints** 

Innovate True Colors Sector – 9, Gurgaon, Haryana (India) Phones: 9971047303, 9910404962 Email : namathurkar@yahoo.co.in silhouette paints@icloud.com

# **TEST CERTIFICATE**

PRODUCT NAME : SILTHERM H.R. SILVER PAINT 250°C

DATE:- 15/07/2017

BATCH NO. : R&D, 07/17

### A. a) LIQUID PAINT PROPERTIES :

SR.NO.	TEST PERAMETER	TEST CONDITION	SPECIFICATION	RESULT
1	VISCOSITY (SEC)	B4 FORD CUP AT 30°C	45 <u>+</u> 5	40 sec
2	WT/10Ltr. (kg)	GALLON CUP	10.0 <u>+</u> 0.5	9.99
3	% NVM	120°C/1 HRS. IN CONVECTION OVEN	40 <u>+</u> 2	38.2
b) APPLICATION DETAILS:				

SR. NO.	TEST PERAMETER	TEST CONDITION	SPECIFICATION	RESULT
1	RECOMMENDED THINNER	••••	HR THINNR	HR THINNER

#### B. <u>DRY FILM PROPERTIES:</u>

PANEL PREPARATION: MS/SUS409L PANELS OF 1.0 TO 1.5 mm THICKNESS. GRIT BLASTING & AIR DRY OFF FOLLOWED BY APPLICATION OF SILTHERM H. R. SILVER PAINT 250°C. FLASH OFF FOR 15-20 MIN. AND BAKED AT 180°C/30 MIN. (EMT) OR Air dry. DFT: Minimum 35  $\mu$  OF H.R. SILVER 250°C

TESTS WERE INITIATED AFTER 24 HRS OF PANEL PREPARATION.

SR. NO	TEST PERAMETER	TEST CONDITION	ACCEPTANCE CRITERIA	RESULT
1	COLOUR /SHADE	Observe in day light or equivalent at 35 deg .	Colour/shade to match with the approved shade panel visually.	CLOSE TO STD
2	DRY FILM THICKNESS	DFT METER	Min 35 microns	55-60 microns
3	ADHESION ON SURFACE	Make lattice pattern in the film at 1mm spacing 11 cuts . Apply permacel tape (P 254) .	95/100 square to be intact.	PASSES
4	FLEXIBILITY	<sup>1</sup> ⁄4" should pass when bend at 180 deg. On conical mandrel.	No cracking, flaking or other damage of film.	PASSES

## C CORROSION & CHEMICAL RESISTANCE TEST

SR. NO	TEST PERAMETER	TEST CONDITION	ACCEPTANCE CRITERIA	RESULT
1	NEUTRAL SALT SPRAY TEST	Test at 35±1°C with 5% NaCl in distilled/ DM water. Panels to be placed at 15 to 30 deg. To vertical. Fog collection 1-2 ml//hr. Tested sample to be cleaned. Dried and checked after 2 hr.	Creepage along X mark to be 2 mm max. on either side . No rust . no blister & no failure beyond 2 mm from X mark Expose for 48 hrs.	PASSES

## D TEST AFTER HEAT AGEING:

SR. NO	TEST PERAMETER	TEST CONDITION	ACCEPTANCE CRITERIA	RESULT
1	HEAT RESISTANC E TEST	Heat the component / panel at 250°C for 5 hrs .	No film failure. Check it after 24 hrs. for following tests Sr. No.1 a)	PASSES
а	ADHESION TEST	Make lattice pattern in the film at 1mm spacing 11 cuts for DFT up to 50 mic. Apply permacel tape (P 254) and pull out tape. Test as per ASTM D 3359-83.	For DFT <50 micron - 95/100 square to be intact.	PASSES
b	HEAT QUENCHING	250°C / 1 Hour immediate quenching in water of ambient temp. for 2 cycles.	No film failure.	PASSSES



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**APPROVED BY :**