

SKZ - Testing GmbH · Friedrich-Bergius-Ring 22 · 97076 Würzburg

Simta Clear Coats Private Limited
Mr. Srinivasan Krishnamoorthy
No. 4/56, Somanur Road, Muthugoundenpudur
Sulur, IDA bollaram, Bachupally, Miyapur
Coimbatore-641406
TAMIL NADU
INDIA

Wolfgang Ries
Tel.: +49(0)931 4104-126
Fax: +49(0)931 4104-271
w.ries@skz.de

25 July 2022 / km

SKZ test order no. 221565/22 (Continuation of test order no. 211862/20, test order no. 206900/19 and test order no. 131833/18)
Final results of the weathering fastness test according to DIN EN 12608-1, test method item 5.9

Dear Krishnamoorthy,

Please find below the following results of the final assessment of the weathering fastness test after artificial weathering of **25,463** hours:

Irradiation energy: **50 GJ/m²**

Artificial weathering according to DIN EN 513, procedure 2 (simulation of a severe climatic zone S) up to a raised irradiation dose of 50 GJ/m² in the wave length range between 300 nm and 800 nm.

1. Colourimetric assessment and measuring of gloss:

The sample colour was measured by means of a spectrophotometer of a wave length area of 360-750 nm, standard light type D65, gloss inclusion, 10° normal inspection. The colour distance ΔE^*_{ab} was determined according to DIN EN ISO 11664-4. Prior to and after artificial weathering, colour was measured at the same position on the sample to obtain reproducible results despite the structured surface.

Please note that the colourimetric assessment of the structured foils can only be taken as a guide value.

2. Visual assessment

Visual assessment was performed according to DIN EN 20105-A02 with the grey scale.

Sample: **"SIMTA ASTRIX"**

Time of exposure	Dose of irradiation	Colour coordinates			Total colour distance ΔE^*_{ab}
		ΔL^*	Δa^*	Δb^*	
1000 h	2 GJ/m ²	0.2	0.2	-2.0	2.0
2000 h	4 GJ/m ²	0.2	0.2	-1.9	1.9
3000 h	6 GJ/m ²	0.2	0.1	-1.4	1.4
4000 h	8 GJ/m ²	0.1	0.1	-1.6	1.6
5000 h	10 GJ/m ²	0.1	0.1	-1.5	1.5
6111 h	12 GJ/m ²	0.1	0.2	-1.7	1.7
7000 h	14 GJ/m ²	0.2	0.2	-1.7	1.7
8148 h	16 GJ/m ²	0.2	0.2	-1.7	1.7
9000 h	18 GJ/m ²	0.2	0.2	-1.8	1.8
10000 h	20 GJ/m ²	0.2	0.2	-1.8	1.8
11000 h	22 GJ/m ²	0.2	0.2	-1.8	1.8
12000 h	24 GJ/m ²	0.2	0.2	-1.8	1.8
13000 h	26 GJ/m ²	0.2	0.2	-1.7	1.7
14000 h	28 GJ/m ²	0.2	0.2	-1.6	1.6
15000 h	30 GJ/m ²	0.2	0.2	-1.7	1.7
16000 h	32 GJ/m ²	0.2	0.2	-1.7	1.7
17000 h	34 GJ/m ²	0.2	0.2	-1.7	1.7
18000 h	36 GJ/m ²	0.2	0.2	-1.7	1.7
19000 h	38 GJ/m ²	0.2	0.2	-1.8	1.8
20370 h	40 GJ/m ²	0.2	0.2	-1.7	1.7
21000 h	42 GJ/m ²	0.2	0.2	-1.7	1.7
22000 h	44 GJ/m ²	0.2	0.2	-1.6	1.6
23000 h	46 GJ/m ²	0.2	0.2	-1.6	1.6
24000 h	48 GJ/m ²	0.2	0.1	-1.5	1.5
25463 h	50 GJ/m ²	0.2	0.2	-1.7	1.7

Sample: **"SIMTA ASTRIX"**

Time of exposure	Dose of irradiation	Grey scale value		Remark
		A 02	A 03	
1000 h	2 GJ/m ²	4 - 5	-	lighter
2000 h	4 GJ/m ²	4 - 5	-	lighter
3000 h	6 GJ/m ²	4 - 5	-	lighter, duller
4000 h	8 GJ/m ²	4 - 5	-	lighter, duller
5000 h	10 GJ/m ²	4 - 5	-	lighter, duller
6111 h	12 GJ/m ²	4 - 5	-	lighter, duller
7000 h	14 GJ/m ²	4 - 5	-	lighter, duller
8148 h	16 GJ/m ²	4	-	lighter, duller
9000 h	18 GJ/m ²	3 - 4	-	lighter, duller
10000 h	20 GJ/m ²	4	-	lighter, duller
11000 h	22 GJ/m ²	4	-	lighter, duller
12000 h	24 GJ/m ²	4	-	lighter, duller
13000 h	26 GJ/m ²	4	-	lighter, duller
14000 h	28 GJ/m ²	4	-	lighter, duller
15000 h	30 GJ/m ²	4	-	lighter, duller
16000 h	32 GJ/m ²	4	-	lighter, more blue, duller
17000 h	34 GJ/m ²	4	-	lighter, more blue, duller
18000 h	36 GJ/m ²	4	-	lighter, more blue, duller
19000 h	38 GJ/m ²	4	-	lighter, more blue, duller
20370 h	40 GJ/m ²	4	-	lighter, more blue, duller
21000 h	42 GJ/m ²	4	-	lighter, more blue, duller
22000 h	44 GJ/m ²	4	-	lighter, more blue, duller
23000 h	46 GJ/m ²	4	-	lighter, more blue, duller
24000 h	48 GJ/m ²	4	-	lighter, more blue, duller
25463 h	50 GJ/m ²	4	-	lighter, more blue, duller

If you have any questions, don't hesitate to contact me.

Best regards

SKZ - Testing GmbH

i. A. 

Wolfgang Ries

Deputy Group Manager Testing Laboratory
Profiles and Sealants