

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

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

SUDHAKAR uPVC WINDOWS AND DOORS
Mr. Sanjay Meela
Mahesh Devarashetti 96664 46664 IDA Nacharam
Road Number 7, Secunderabad,
TELANGANA 500076
INDIA

9 January 2020 / km

Interim results of the weathering fastness test
Test order no. 135387/19

Dear Mr. Meela,

Please find below the following results of the interim assessment of weathering fastness after artificial weathering of approx. **5,000** hours:

Irradiation energy: approx. **10 GJ/m²**

Artificial weathering according to DIN EN 513, procedure **2** (simulation of a severe climate zone **S**) up to an raised irradiation dose of **20 GJ/m²** in the wave length range between 300 nm and 800 nm.

1. Colourimetric assessment:

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.

2. Visual assessment

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

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

Time of exposure	Dose of irradiation	Colour coordinates			Total colour distance ΔE^*
		ΔL^*	Δa^*	Δb^*	
1000 h	2 GJ/m ²	0.8	0.2	-1.9	2.1
1750 h	3,5 GJ/m ²	0.7	0.2	-1.8	1.9
2000 h	4 GJ/m ²	0.8	0.1	-1.7	1.9
3000 h	6 GJ/m ²	0.8	0.0	-1.4	1.6
4000 h	8 GJ/m ²	0.6	-0.1	-0.9	1.1
5000 h	10 GJ/m ²	0.8	-0.1	-1.0	1.3
6000 h	12 GJ/m ²	-	-	-	-
7000 h	14 GJ/m ²	-	-	-	-
8000 h	16 GJ/m ²	-	-	-	-
9000 h	18 GJ/m ²	-	-	-	-
10000 h	20 GJ/m ²	-	-	-	-

Time of exposure	Dose of irradiation	Grey scale value		Remark
		A 02	A 03	
1000 h	2 GJ/m ²	4 - 5	-	lighter, more blue
1750 h	3,5 GJ/m ²	4 - 5	-	lighter, more blue
2000 h	4 GJ/m ²	4 - 5	-	lighter, duller, more blue
3000 h	6 GJ/m ²	4 - 5	-	lighter, duller, more blue
4000 h	8 GJ/m ²	4 - 5	-	lighter, duller, more blue
5000 h	10 GJ/m ²	4 - 5	-	lighter, duller
6000 h	12 GJ/m ²	-	-	-
7000 h	14 GJ/m ²	-	-	-
8000 h	16 GJ/m ²	-	-	-
9000 h	18 GJ/m ²	-	-	-
10000 h	20 GJ/m ²	-	-	-