

TEST REPORT: 7191248183-CHM21-PGK

Date: 04 MAR 2021

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SUBJECT

Xenon-arc simulated weathering test

CLIENT

KSC Industries (M) Sdn Bhd
No. 16, Jalan Sungai Jeluh 32/189
Bukit Naga, Seksyen 32,
40460 Shah Alam, Selangor
Malaysia

SAMPLE SUBMISSION DATE

23 Dec 2019

DATE TEST CONDUCTED

31 Jan to 24 Dec 2020

DESCRIPTION OF SAMPLE

Three pieces of wood coating sample (dimension 150 mm x 75 mm) was submitted by the Client.



Laboratory:
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METHOD OF TEST

ISO 16474-2 : 2013

“Paints and varnishes - Methods of exposure to laboratory light sources”

Part 2: Xenon-arc lamps – Method A

Test conditions:

Apparatus used	:	Xenotest Beta LM
Operating cycle	:	102 mins of light followed by 18 mins of light and water spray (Cycle 1)
Light source (continuous)	:	Air-cooled Xenon-arc lamps
Filter system	:	Xenochrome 300 in Suprax cylinder
UV irradiance	:	60 W/m ² at 300 to 400 nm
Black standard temperature	:	65 ± 3°C
Air temperature in test enclosure	:	38 ± 3°C
Relative humidity (dry period)	:	50 ± 5%
Test duration	:	6,109 light hours

Method of assessment

ISO 105-A02 : 1993 (2014)

“Grey scale for assessing change in colour (including half-steps)”

Grey Scale for assessing colour change ranges from 1 to 5 :

5 : No perceived difference in colour between the exposed and unexposed specimen

1 : Greatest contrast in colour between the exposed and unexposed specimens

RESULT

Wood Coating Sample	Visual Appearance after 6,109 hours of Xenon-arc Simulated Weathering Test
Specimen 1	<ul style="list-style-type: none">- No blistering nor cracking- Severe colour change, grey scale 2- Slight coating detachment
Specimen 2	<ul style="list-style-type: none">- No blistering nor cracking- Severe colour change, grey scale 2- Moderate coating detachment

MS PECK GEOK KHOON
TEAM LEADER

DR LI SIHAI
AVP/ SENIOR CHEMIST
COATINGS & INDUSTRIAL CHEMICALS
CHEMICAL & MATERIALS

APPENDIX

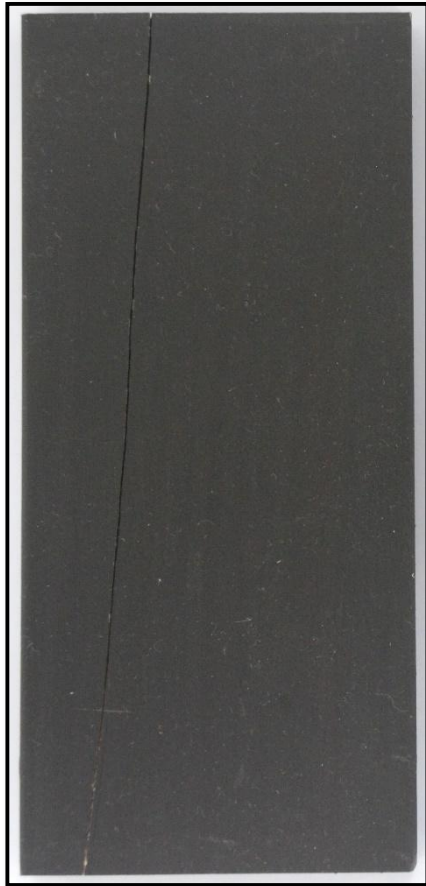


Figure 1. Reference Sample
(Unexposed Specimen)



Figure 2. Specimen 1 – After exposure to
6,109 hours of Xenon-arc Simulated Weathering Test



Figure 3. Specimen 2 – After exposure to
6,109 hours of Xenon-arc Simulated Weathering Test

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Effective 01 September 2020

