

TEST REPORT: 7191163042-CHM17-CSY

Date: 06 JUN 2017

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SUBJECT

Evaluation of Paint Sample Comply with SIRIM Eco-Labeling Scheme.

CLIENT

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

Attn : Ms Puah

DESCRIPTION OF SAMPLE

One bottle of sample labelled as follows was received on 15 May 2017.

Brand Name	Product name	Quantity
Bonshure	Bonshure Primer e-4nova	1 x 1L

DATE OF TEST

16 May 2017 – 28 May 2017



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TUV®

METHOD OF TEST

The sample was tested in the “as-received” condition.

- | | | |
|----|---|--|
| 1) | Formaldehyde | The sample was analysed by UV-Vis Spectrophotometer using Acetylacetone as reagent. |
| 2) | Mercury, Lead, Cadmium | The sample was digested in inorganic acid, followed by analysis using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). |
| 3) | Hexavalent Chromium | The sample was analysed by UV-Vis spectrometer using 1,5-Diphenylcarbohydrazide as derivatizing agent. |
| 4) | Volatile organic compound content | By BS EN ISO 11890-2:2006, Paints and varnishes – <i>Determination of volatile organic compound (VOC) content – Part 2 : Gas-chromatographic method.</i> |
| 5) | Halogenated hydrocarbons
Aromatic hydrocarbons | By Gas Chromatograph –Mass Spectrometry (GC-MS). |

SUMMARY OF TEST RESULTS

The summary of test results for “Bonshure Primer e-4nova”.

Item No.	Test	Result	Method Detection Limit	SIRIM Eco-Labeling Criteria	Inferred Remark
1	Formaldehyde Content	Not Detected	10 mg/kg	< 100 mg/kg	Pass
2	Heavy Metals: Mercury, Lead, Cadmium	Not Detected	0.01%	Shall not contain in the formula	Pass
3	Hexavalent Chromium	Not Detected	0.01%	Shall not contain in the formula	Pass
5	VOC Content	2.3 g/L	2 g/L	< 50 g/L ^a	Pass
6	Halogenated hydrocarbons	Not Detected	0.001%	< 0.01%	Pass
7	Aromatic hydrocarbons	Not Detected	0.01%	< 0.1% ^b	Pass

^a For Emulsion paints (< 50 g/L), For Other water-based varnishes (< 100 g/L), For Solvent-based paints and varnishes (< 300 g/L)

^b For Emulsion paints (< 0.1%), For Other water-based varnishes (< 1%), For Solvent-based paints and varnishes (< 5%)

RESULTS (Cont'd)

Table 1 : The Formaldehyde results for “Bonshure Primer e-4nova”.

Test	Result	Method Detection Limit
Formaldehyde Content	Not Detected	10 mg/kg

Table 2 : The Elemental results for “Bonshure Primer e-4nova”.

Test	Result	Method Detection Limit
Mercury	Not Detected	0.01%
Lead	Not Detected	0.01%
Cadmium	Not Detected	0.01%
Hexavalent Chromium	Not Detected	0.01%

Table 3 : The Volatile Organic Compound (VOC) content for “Bonshure Primer e-4nova”.

Test	Result	Method Detection Limit
VOC Content ^a	2.3 g/L ^b	2 g/L

a) Volatile organic compound (VOC) means any organic compound having an initial boiling point less than or equal to 250 °C measured at a standard pressure of 101,3 kPa.

b) The result was calculated based on the specific gravity = 0.925 provided by the client

Table 4 : The analytical results for “Bonshure Primer e-4nova”.

Test	Result	Method Detection Limit
Halogenated hydrocarbons	Not Detected	0.001%
Aromatic hydrocarbons	Not Detected	0.01%



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TECHNICAL EXECUTIVE



DR XIAO ZHOU
PRODUCT MANAGER
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CHEMICAL & MATERIALS

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PSB Singapore

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July 2011

