

Specification for lead and chromate-free primer for iron and steel substrates

AMENDMENT NO. 2

February 2021

1. Page 8, Table 1 – Quantitative requirements of the paint

Delete the row on “Chromium content” including its maximum limit requirement.

Insert a row on “Chromium (VI) content” with the maximum limit requirement and *replace* the row for lead content including its maximum limit requirement as show in the table below.

Characteristic	Requirement	
	Minimum	Maximum
Lead content, ppm (mg/kg) of dried paint film	-	90
Chromium (VI) content, ppm (mg/kg) of dried paint film	-	100

2. Page 9, 4.4.7 Resistance to cyclic fog test (Prohesion)

Replace “ASTM D714” and “ASTM D610” with “SS 5 : Part H2” and “SS 5 : Part H3” respectively.

3. Page 10, Table 2 – Test methods

Delete the row on “Chromium content” including its test method.

Insert a row on “Chromium (VI) content” with its test method and *replace* the test method for through-dry time as shown in the table below.

Test	Method of test (Refer to SS 5 unless otherwise specified)
Chromium (VI) content	IEC 62321-7-2
Through-dry time	Part D5

4. Page 11, Standards referred to:

Replace with the following:

Standards referred to:

For undated references, the latest edition of the referenced document (including any amendments) applies.

ASTM G85	Standard practice for modified salt spray (fog) testing
BS 5252F	Colour matching fan
IEC 62321-7-2	Determination of certain substances in electrotechnical products - Part 7-2: Hexavalent chromium - Determination of hexavalent chromium (Cr(VI)) in polymers and electronics by the colorimetric method

Singapore Standard SS 494 : 2001
Amendment No. 2

SS 5

Methods of test for paints, varnishes and related materials

Part A1	Sampling
Part A2	Examination and preparation of samples for testing
Part A3	Standard panels for testing
Part B2	Determination of non-volatile matter content
Part B3	Determination of water by the Dean and Stark method
Part B4	Condition in container
Part B5	Skinning (partially filled container)
Part B6	Storage stability (filled container)
Part B7	Density
Part B9	Brushing properties
Part B12	Consistency of paints using the Stormer viscometer
Part B13	Fineness of grind
Part B14	Pigment content (centrifuge)
Part B15	Determination of flash point – Closed cup equilibrium method
Part C6	Determination of low concentrations of lead, cadmium and cobalt in paint by atomic absorption spectroscopy
Part D2	Surface-drying test (ballotini method)
Part D5	Determination of through-dry state and through-dry time
Part E2	Determination of contrast ratio (opacity) of light-coloured paints at a fixed spreading rate
Part E3	Visual comparison of the colours of paints
Part F1	Bend test (cylindrical mandrel)
Part F2	Scratch test
Part H2	Assessment of degree of blistering
Part H3	Assessment of degree of rusting

NOTE –

- 1 IEC 62321-7-2 is used for the evaluation of Cr(VI) content in electrotechnical products and can also be used for coatings.