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SINGAPORE STANDARD

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

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The Working Group appointed by the Technical Committee and responsible for the preparation of this standard consists of representatives from the following organisations :

		Name	Organisation
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Foreword

This Singapore Standard was prepared by the Working Group on Lead and Chromate-free Primer for Iron and Steel Substrates appointed by the Technical Committee on Paints and Varnishes under the direction of the Chemical Standards Committee.

Red lead and zinc chromate have been widely used in metal primers to protect iron and steel substrates against corrosion. Due to the toxicity of red lead and zinc chromate and its negative impact on the environment and health, SS 206 : 1978 – 'Zinc chromate primer' and SS 6 : 1970 – 'Red lead based primers for iron and steel surfaces' would ultimately be withdrawn following the establishment of this Singapore Standard.

Furthermore, there is an impending legislation by the Ministry of the Environment on the restriction of the use of lead and possibly chromate in paints.

During the Working Group meetings, there was technological transfer in the development of prototype primers that are both lead and chromate-free among the paint companies in Singapore. A Singapore Standard on this non-toxic primer that could perform likewise or better than the toxic pigments is therefore necessary to meet the market needs.

This Singapore Standard will harmonise the quality of the 'green' primer produced, improve and protect health, and also serve as a performance standard for specifiers like the architect to protect iron and steel substrates from corrosion using environmentally safe products.

In preparing this standard, references were made to the following publications:

1 Australian Standard AS 4025.4-994 – 'Paints for equipment including ships, Part 4 : Solvent-borne – Lead and chromate free – Anticorrosive metal primer'

2 Federal Specification TT-P-664 D, Notice 1, August 28, 1992 – 'Primer coating, alkyd, corrosion-inhibiting, lead and chromate free, VOC-compliant'

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*

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1 Scope and classification

This specification applies to a ready-for-use paint suitable for use as a primer in the protection of iron and steel surfaces under both indoor and outdoor weathering conditions.