

SRI LANKA STANDARD 1012 : 1994

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**SPECIFICATION FOR
COPPER/CHROMIUM/ARSENIC BASED
TIMBER PRESERVATIVES**

SRI LANKA STANDARDS INSTITUTION

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SLS 1012 : 1994

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Sri Lanka.

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FOREWORD

This standard was approved by the Sectoral Committee on Chemicals and Chemical Technology and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 1994-03-31.

The water-borne timber preservatives usually consist of a mixture of inorganic preservative salts together with a fixing agent, normally a dichromate, dissolved in water. This standard covers preservatives containing a mixture of compounds of copper(II), chromium (VI) and arsenic (V). The preferred mixtures of compounds are either copper(II) sulfate, sodium or potassium dichromate and hydrated diarsenic pentoxide or copper(II) oxide, chromium(VI) oxide and hydrated diarsenic pentoxide.

Water borne timber preservatives undergo chemical changes within the timber and become insoluble in water. Therefore, they are resistant to leaching and are suitable for both internal and external use. The treated timber is generally not corrosive to metals but should not be used in direct contact with light alloys or rubber. After re-drying, the timber is clean in appearance (although it may be coloured) and can be painted and glued satisfactorily. The preservative does not creep and stain adjacent materials. Treatment with these preservatives increases the moisture content of the timber and for some usages re-drying is necessary. The wetting of the timber during treatment and subsequent re-drying cause the timber to swell and then to shrink. This can result in raising of the grain and sometimes a certain amount of distortion when the quality of the timber is such as to render it prone to irregular movement. The normal range of water-borne preservatives can significantly increase the electrical conductivity of the timber but it does not give rise to any trouble once the timber has dried out. For users where low conductivity is important it is advisable to check that the treatment will not have any adverse effect.

This standard covers two mixtures of slightly different composition of copper/chromium/arsenic based timber preservatives. It may be supplied either in powder form or in paste or liquid form.

This preservative contains substances which are injurious to health if adequate precautions are not taken. It is important to wear, wherever necessary, protective clothing such as rubber or plastic coated gloves, face masks, goggles and head and foot gears. The hazards from the preservative should be well understood by all the staff and recommended code of practice should be followed. Health hazards associated with the preservative in powder form is greater when compared with the other forms. Therefore, from the safety point of view, it is recommended that use of powder form be avoided as far as possible. In case of an accident, first-aid treatment to be followed is given in Appendix F as a guidance.