

(PREVIEW)

**Indian Standard****SPECIFICATION FOR  
SODIUM FORMALDEHYDE SULPHOXYLATE****0. FOREWORD**

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 29 January 1968, after the draft finalized by the Inorganic Chemicals ( Miscellaneous ) Sectional Committee had been approved by the Chemical Division Council.

**0.2** Sodium formaldehyde sulphoxylate (  $\text{NaHSO}_2 \cdot \text{CH}_2\text{O} \cdot 2\text{H}_2\text{O}$  ), a derivative of sodium hydrosulphite and formaldehyde, is a sodium salt of sulphonylic acid formaldehyde, molecular weight 154. It typically contains as impurity sodium bisulphite formaldehyde (  $\text{NaHSO}_3 \cdot \text{CH}_2\text{O} \cdot \text{H}_2\text{O}$  ) as well as sodium sulphite.

**0.3** Sodium formaldehyde sulphoxylate is a powerful reducing agent and exerts its full reducing action intensively only at high temperatures. Due to its specific characteristic in differing from its allied product sodium hydrosulphite, sodium formaldehyde sulphoxylate finds extensive application in textile industry for printing and stripping dyed textiles prior to redyeing. It is used in bleaching oils, fats and soaps and also employed as a delayed action coagulant for rubber latex.

**0.4** The production of the sodium formaldehyde sulphoxylate has been recently started in the country. It is manufactured by reacting sulphur dioxide with zinc dust in aqueous suspension to form zinc hydrosulphite solution. Formaldehyde and more zinc dust are added to this solution to form basic zinc formaldehyde sulphoxylate which is subsequently decomposed with caustic soda to form sodium formaldehyde sulphoxylate and insoluble zinc hydroxide.

**0.5** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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\*Rules for rounding off numerical values (*revised*).