## (PREVIEW) Indian Standard SPECIFICATION FOR GLASS RODS AND TUBING FOR LABORATORY GLASSWARE

## 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 17 July 1974, after the draft finalized by the Laboratory Glassware and Related Apparatus Sectional Committee had been approved by the Chemical Division Council.

**0.2** Glass rods and tubing made from glass having coefficients of cubical thermal expansion between  $0.000\ 010$  and  $0.000\ 030$  per degree Celsius form the most important starting material for the manufacture of a large variety of laboratory glassware. This standard is intended to lay down basic requirements of glass rods and tubing without interfering with the supply of small quantities of rods and tubing for some special purposes.

**0.3** Glass rods having maximum diameter of 38 mm and tubing having maximum outside diameter of 110 mm, with appropriate dimensional tolerances, and having three ranges of wall thickness, namely, light, medium and heavy, have been prescribed in this standard to cater to the needs of manufacturers of laboratory glassware. In this standard, a range of capillary tubing, other than that used in the manufacture of liquid-in-glass thermometers, has also been prescribed with maximum outside diameter and bore of 10 mm and 3.5 mm respectively.

0.4 This standard contains clauses 4.2, 4.4.1, 5.1 and 5.2.1 which call for agreement between the purchaser and the supplier.

**0.5** For the purpose of deciding whether a particular requirement of this standard is complied with, the final values, observed or calculated, expressing the results 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 values should be the same as that of the specified values in this standard.

## 1. SCOPE

1.1 This standard specifies requirements and methods of sampling and test for glass rods and tubing intended for fabrication of laboratory glassware.

<sup>\*</sup>Rules for rounding off numerical values (revised).