

(PREVIEW)

*Indian Standard***SPECIFICATION FOR
DENSITY HYDROMETERS****PART I REQUIREMENTS****0. FOREWORD**

0.1 This Indian Standard (Part I) (First Revision) was adopted by the Indian Standards Institution on 28 January 1982, after the draft finalized by the Laboratoryware and Related Apparatus Sectional Committee had been approved by the Chemical Division Council.

0.2 This standard was first published in 1965. However, with the revision of ISO 649-1968 'Laboratory glassware-Density hydrometers for general Purposes' issued by the International Organization for Standardization (ISO), the Committee responsible for the preparation of the standard decided to revise it with a view to aligning it with the international standard.

0.3 In this revision, the standard has been prepared in two parts. Part I covers requirements of hydrometers and Part II covers methods of test and use of these hydrometers.

0.4 Part I covers eight series of hydrometers comprising five main series and three special sub-series. Each of the five main series comprises hydrometers which cover the density interval 600 to 2 000 kg m³ or 0.6 to 2.0 g/ml (*see 11.1*). These hydrometers are graduated to indicate density at 20° C and are appropriate for use in liquids of low, medium and high surface tension. The hydrometers of the three special sub-series are graduated to indicate density at either 20 or 15°C, have smaller tolerances, are limited to the range 600 to 1 100 kg m³ or 0.6 to 1.1 g/ml and are meant for use in liquids of low surface tension.

1. SCOPE

1.1 This standard (Part I) specifies requirements for glass hydrometers having constant mass and graduated to indicate density (kg/m³ or g/ml) at 20°C.

NOTE — Hydrometers of Special sub-series (*see 0.4 and 4.2*) shall be graduated to indicate density at either 20 or 15°C.

1.1.1 This standard does not cover hydrometers with built-in thermometers.