TANZANIA BUREAU OF STANDARDS DIRECTORATE OF STANDARDS DEVELOPMENT CHEMICAL SECTION

<u>DRAFT TANZANIA STANDARDS ON GLASS AND GLASS PRODUCTS FOR STAKEHOLDERS</u> <u>COMMENTS.</u>

SN	TITLE	SCOPE
1.	CDC 5 (946) DTZS / ISO 4788:2005 Laboratory glassware - Graduated measuring cylinders	This International Standard specifies dimensions, material and constructional and metrological requirements of graduated measuring cylinders of tall form (Type 1a and Type 1b) and of squat form (Type 2). All types are suitable for general laboratory use. The specifications in this International Standard are in conformity with the principles of design and construction of volumetric glassware given in ISO 384.
2.	CDC 5 (947) DTZS / ISO 648:2008 Laboratory glassware - Single-volume pipettes.	This International Standard specifies metrological and constructional requirements for volumetric pipettes with one mark (total delivery) and for volumetric pipettes with two marks, both of which are adequate for general laboratory purposes. The details specified are in conformity with the principles of design and construction of volumetric glassware given in ISO 384. NOTE; For graduated pipettes, see ISO 835. For piston-operated pipettes, see ISO 8655-2
3.	CDC 5 (948) DTZS/ISO 3819:2015 Laboratory glassware – Beakers.	This International Standard specifies requirements for an internationally acceptable series of glass beakers for laboratory use.
4.	CDC 5 (949) DTZS / ISO 835:2007 Laboratory glassware - Graduated pipettes.	This International Standard specifies metrological and constructional requirements for graduated pipettes, adequate for general laboratory purposes. The details specified are in conformity with the principles of design and construction of volumetric glassware given in ISO 384. NOTE For one-mark pipettes, see ISO 648. For piston-operated pipettes, see ISO 8655-2.
5.	CDC 5 (950) DTZS / ISO 383:1976 Laboratory glassware -Interchangeable conical ground joints.	This International Standard specifies the essential geometric requirements for interchangeability in relation to four series of conical ground glass joints for laboratory use.

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6.	CDC 5 (951) DTZS / ISO 384:2015 Laboratory glass and plastics ware - Principles of design and construction of volumetric instruments.	This International Standard sets out principles for the design of volumetric instruments manufactured from glass or from plastics in order to facilitate the most reliable and convenient use to the intended degree of accuracy.
7.	CDC 5 (952) DTZS / ISO 1776:1985 Glass - Resistance to attack by hydrochloric acid at 100 degrees C - Flame emission or flame atomic absorption spectrometric method.	This International Standard specifies flame emission spectrometric (FES) and flame atomic absorption spectrometric (FAAS) methods for determining the amounts of alkali metal oxides released from the surfaces of glassware when subjected to attack by an aqueous Solution of hydrochloric acid at 100 OC. The amount of alkali metal oxides determined is a measure of the acid resistance of the glass.
8.	CDC 5 (953) DTZS / ISO 4787:2010 Laboratory glassware - Volumetric instruments - Methods for testing of capacity and for use.	This International Standard provides methods for the testing, calibration and use of volumetric instruments made from glass in order to obtain the best accuracy in use.
		NOTE Testing is the process by which the conformity of the individual volumetric instrument with the appropriate standard is determined, culminating in the determination of its error of measurement at one or more points.
9.	CDC 5 (954) DTZS / ISO 719:2020 Glass - Hydrolytic resistance of glass grains at 98 °C - Method of test and classification.	This document specifies a) a method for determining the hydrolytic resistance of glass grains at 98 °C. The resistance is measured and expressed by the volume of acid required for titration of the alkali extracted from the unit mass of glass, and can also be expressed by the amount of sodium oxide equivalent to this volume of acid, and b) a classification of glass according to the hydrolytic resistance determined by the method of this document.
		This document is intended for use on the less resistant types of glass, such as soda-lime glass.
10.	CDC 5 (955) DTZS / ISO 695:1991 Glass - Resistance to attack by a boiling aqueous solution of mixed alkali - Method of test and classification.	This International Standard specifies a) a method for determining the resistance of glass to attack by a boiling aqueous Solution of sodium carbonate and sodium hydroxide. The resistance is measured inversely by the loss in mass per unit surface area of the glass; b) a classification of glass according to the alkali resistance determined by the method of this International Standard.
		NOTE The method of test according to this International Standard is also applicable for determining the alkali resistance of glass ceramics.

11.		
	CDC 5 (956) DTZS / ISO 718:1990 Laboratory glassware - Thermal shock and thermal shock endurance -Test methods.	This International Standard specifies a thermal shock test and the procedure for determining the thermal shock endurante for laboratory glassware in the condition received by the customer.
		This International Standard does not apply to fused silica ware and annealed Containers made from soda-lime-silicate glass.
		Annealed Containers made from soda-lime-silicate glass shall be tested according to ISO 7459.
12.	CDC 5 (957) DTZS/ ISO 1769:1975 Laboratory glassware - Pipettes - Colour coding.	This International Standard specifies a System of colour coding for one-mark pipettes for identification of nominal capacities, and for graduated pipettes for identification of nominal capacities and units of sub-division.
13.	CDC 5 (958) DTZS / ISO 3585:1998 Borosilicate glass 3.3 - Properties.	This International Standard specifies the characteristics of a type of glass designated "borosilicate glass 3.3" used for the construction of laboratory glassware, glass plant, pipeline and fittings. NOTE - Annex A lists related International Standards