DEAS 1081: 2021

ICS 83.080.01

EAST AFRICAN STANDARD

Plastic Basin — Specification

EAST AFRICAN COMMUNITY

First Edition 2021

Copyright notice

Contents

Page

Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards. XXXXXX.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 072, *Plastics and related products*

Plastic basin — Specification

1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for plastic basins.

This standard does not apply to plastic basins intended for food handling.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions shall apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
splitting
response of the test specimen to heat evidenced by breaking into pieces, in whole or in part

3.2
distortion
any change in the shape or original dimensions of a test piece, occurring during heat treatment

3.3
reversion
reduction in length expressed as a percentage of the initial length of the specimen

4 Requirements

4.1 General requirements

4.1.1 The basin shall be of good surface finish, free from defects and any excessive sprue shall be removed by cutting

4.1.2 The basins shall be described by their capacities in litres.

4.1.3 The material of the basins shall be natural or coloured polythene or polypropylene. Materials shall be free from any substance which is injurious to human health.

4.1.4 The thickness of the basin at the sides and bottom shall be such as to enable it to comply with the distortion limits specified in 4.2. There shall be no diminution of thickness in the vicinity of the sprue due to shrinkage or drawing in of materials at this point or to the removal of the sprue.

4.1.5 The rim of the basin shall be such as to provide an adequate grip.

4.1.6 To protect the base from abrasion, it shall be so supported that at 90°, when the basin is filled with water, it's under surface excluding the ribs, is at least 5 mm above the plane surface on which it is placed.

4.2 Specific requirements

Basins shall comply with the specific requirements given in table 1.

Table 1 — Specific requirements for plastic basins

Characteristic		Requirements	Test method
Reversion, %, max		5	Annex A
Splitting, mm, max		2	Annex B
Surface attack		no delamination	Annex C
Distortion, %, max	d	10	Annex D
	h	7	
Overload		The edges and the body of the basin shall not crack or break and the edges, rims or handles shall not detach from the supporting wooden frame.	Annex E

5 Packaging

The basins shall be packed in a suitable manner to protect them from dust and surface scratches.

6 Marking and labelling

6.1 Marking on plastic basin

The plastic basin shall be legibly and indelibly marked in English and/or any other official language (French, Kiswahili, etc.) used in the importing East African Partner State with the following information.

a) nominal capacity in litres;

b) code of resin identification and symbol for recycling in accordance with DEAS 1086: 2021 (Code of resin identification);

c) name of the manufacturer and/or trademark;

d) batch or code number; and

e) country of origin

6.2 Labelling of bulk package

6.2.1 The bulk package shall contain plastic basins of the same size.

6.2.2 The bulk package shall be legibly and indelibly labelled in English and/or any other official language (French, Kiswahili, etc.) used in the importing East African Partner State with the following information:

a) name and physical address of manufacturer and/or registered trademark;

b) name of the product as, “Plastic basins”;

c) capacity of the plastic basins in litres of water, for example, 5 L, 10 L, 15 L;

d) declaration of the number of plastic basins in the bulk package;

e) batch or code number;

f) instruction for storage and disposal of the bulk packaging material; and

g) country of origin.

7 Sampling

Sampling shall be done in accordance with annex F.

Annex A
(normative)

Reversion Test

A.1 Specimen

A specimen of dimensions 50 mm x 2.5 mm, shall be cut from the side of the basin such that its main axis is radial to the sprue. Five specimens from separate sections of the side shall be examined in each case.

A.2 Procedure

The specimens shall be measured accurately and then immersed in boiling water for 30 min. On removal, they shall be allowed to cool for 1 h after which the length shall be measured to the nearest 0.5 mm. Reversion is reduction in length expressed as a percentage of the initial length of the specimen.

.

Annex B
(Normative)

Splitting test

B.1 Specimen

The specimen consists of a disc 75 mm diameter with the sprue at its centre, cut from the base of the basin. A slit 38 mm ± 1.5 mm long is made in the specimen so that its mid-point lies on the centre of the circular specimen and extends through its thickness. (The slit may conveniently be cut with a single-edged razor blade.)

B.2 Procedure

The specimen shall be immersed in boiling water for 30 min. On removal from the water bath, the specimen shall be allowed to cool with no applied constraint.

Annex C
(normative)

Surface attack test

C.1 Specimen

The specimen used shall be exactly similar to that employed in Annex A, but cut from the base of the basin so that the centre point is 75 mm from the sprue.

C.2 Procedure

Four specimens shall be immersed in an organic solvent at 40 °C for 4 h. The solvent shall be contained in about 150 mm x 25 mm test tube immersed in a water bath at 40 °C ± 0.5 °C and allowed to attain the temperature before the introduction of the specimens. After removal from the solvent, the specimens shall be placed on blotting paper and allowed to dry for 1 h. The extent and nature of the effect produced on its surface shall be recorded.

Annex D
(normative)

Distortion test

D.1 The basin shall be suspended on its edges by use of two wooden frames laid parallel to each other and just touching the sides of the basin (see Figure D.1

D.2 The diameter (d) of the basin shall be measured to the nearest 1 mm.

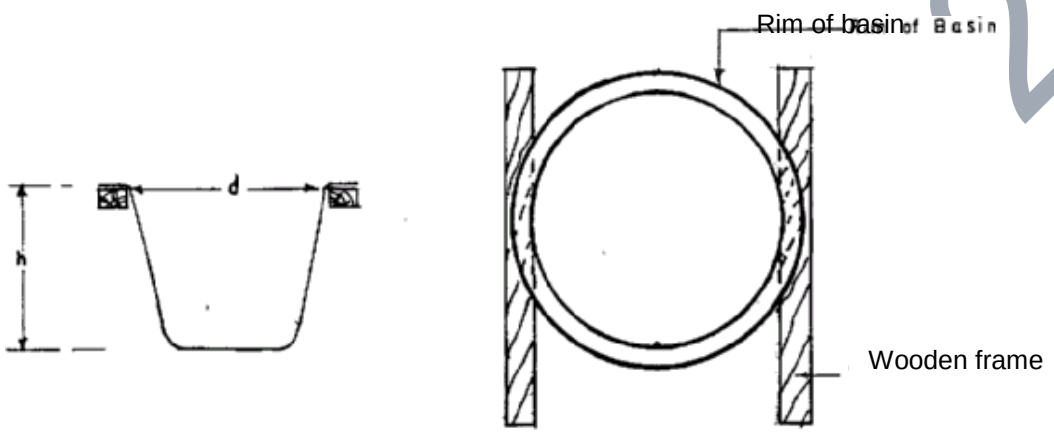

Figure D.1 — Distortion test

D.3 The depth (h) from the edge to the bottom of the basin shall also be measured.

D.4 Water of 90 °C ± 2 °C shall be then poured into the basin until it is filled to a level of 25 mm from the rim. After five minutes, the above dimensions shall be measured again. The changes shall be expressed as percentages of the initial dimensions

Annex E
(normative)

Overload Test

The basin shall be suspended as described in Annex D. Lead shots or any other suitable material of a weight equal to twice that of water required to fill the basin shall be poured into the basin. The effect on the rim shall be noted in terms of the criteria specified in Table 1

Annex F
(normative)

Criteria for sampling

F.1 Scale of sampling

F.1.1 In any consignment, all basins of the same size and same type and belonging to the same batch of manufacture shall be grouped together to constitute a lot.

F.1.2 For ascertaining conformity of the material to the requirements of this standard, samples shall be tested from each lot separately.

F.1.3 The number of basins to be sampled from a lot shall depend upon the size of the lot and shall be in accordance with Table F.1.

Table F.1 — Scale of sampling and permissible number of defectives

Lot size	For finishing, handle/Rim, construction and brimful capacity		Number of basins to be selected for distortion, overload test	Subsample size for reversion, splitting and drop tests
	Number of basins to be selected	Permissible number of defectives		
≤ 50	5	0	3	3
51 t0 100	8	0	5	3
101 to 150	13	1	5	3
151 to 300	20	2	8	3
301 to 500	32	3	8	3
501 to 1 000	50	5	13	4
≥ 1 001	80	7	13	4

F.2 Number of tests and criteria for conformity

F.2.1 The basins selected shall be examined for finishing, handle/rim and workmanship . A basin failing to meet any one or more of these requirements shall be considered as defective. The lot shall be considered as conforming to the requirements of these characteristics, if the number of defective basins in the sample is less than or equal to the corresponding number given in column 3 of Table F.1.

F.2.2 The lot having been found satisfactory according to F.2.1 shall be subjected to distortion test and overload test. For this purpose, the number of buckets given in column 4 of Table F.1 shall be selected at random from the lot. These may be selected from those already examined according to F.2.1 and found satisfactory. A basin failing in any of these tests shall be considered as defective. The lot shall be considered to have passed these tests if no defective bucket is found in the sample.

G.2.3 The lot having been found satisfactory according to F.2.1 and F.2.2 shall finally be subjected to brimful, drop, reversion and splitting tests

Bibliography

[1] US 766:2007, *Plastic basin — Specification*

[2] TZS 1877–2: 2016, *Plastic container — Specification — Part 2: Basin*