SAUDI STANDARDS, METROLOGY AND QUALITY ORGANIZATION

Project No. 33237 /2023

Stain Remover for Tableware

ICS 11.040.01

Stain Remover for Tableware

1. Scope and Field of Application

1.1 This standard concerned with requirements for a distaining compound for the removal of coffee, tea and other adsorbed food stains primarily from plastic tableware, be the immersion process. The compound is for use in hard or soft water.

1.2 The compound may also be used on glass and china tableware, although it is not intended primarily for this purpose. It may also be used to destain coffee urns, except those made of aluminium. Due to its tendency to deteriorate and lose oxygen in storage, it is advisable not to purchase more than six months supply at any one time.

2. Complementary References

2.1 SASO ISO 862 "Surface active agents — Vocabulary"

2.2 SASO ISO 607 "Surface active agents and detergents - Methods of sample division"

2.3 GSO 1810 "Labeling for Chemical Products"

2.4 SASO 2333 "Stain Remover for Tableware – Test Methods"

2.5 SASO ISO 4316 "Surface active agents — Determination of pH of aqueous solution — Potentiometric method"

2.6 SASO 2058 "Standard Test Methods for Sampling and Chemical Analysis of Soaps and Soap Products"

3. Terms and Definitions

For the purposes of this standard terms and definitions given in 2.1 and the following apply.

3.1 **Tableware:**

Dishes used to set a table, serve and display food. It includes cutlery, glassware, serving dishes and other useful items for practical as well as decorative purposes

4. Requirements

4.1 General requirements

4.1.1 The destaining compound shall be a uniform, free-flowing, stable, granular or powdered material.

4.1.2 It shall be free from objectionable and unwanted odors.

4.1.3 It shall not contain toxic materials.

4.1.4 The destaining compound shall not contain soap, when tested in accordance with SASO mentioned in item (2.4).

4.2 Specific requirements

Stain remover for tableware shall comply with the specific requirements specified in Table 1 when tested in accordance with SASO mentioned in item (2.4), (2.5) and (2.6).

Table 1 — Specific requirements for Stain remover for tableware

No.	Characteristic	Requirement
4.2.1	Available active oxygen, %, m/m	Min 4.5
4.2.2	Available chlorine, %, m/v	Min 4.5
4.2.3	pH, 2% solution, at 25℃ ± 2 ºC	10.5 – 11.5
4.2.4	Solution stability, %, 5.0% water solution, for 3h at 80℃ ± 2 ºC	Max loss 30
4.2.5	Stability in dry form, %, for 24h at 70℃ ± 1 ºC	Max loss 10
4.2.6	Storage stability, %, for a period of six months at 20 – 30℃	Max loss 10
4.2.7	Surface tension, mN/m, 1.0% distilled water solution, at 25℃	Max 40
4.2.8	Insoluble matter, % by mass	Max 1

5. Sampling

Each consignment shall be divided into a similar group having the same size, batch number or date of production. From each group a number of units shall be drawn at random, in accordance with their following Table (2).

Table 2 — Number of units drawn from each group

Group size	Number of drawn units
4 – 15	3
16 – 40	4
41 – 65	5
66 – 100	7
101 and above	10

6. Test Methods

- Before making the required analysis, the stain remover shall be thoroughly mixed in a tumbler mixer for 30 min.
- The tests shall be carried out in accordance with standards mentioned in item (2.4), (2.5) and (2.6).
- The tests shall be carried out on samples drawn accordance with item (5).

6.1 Visual inspection

6.2 Determination of active oxygen.

6.3 Determination of available chlorine.

6.4 Determination of pH.

6.5 Determination of solution stability.

6.6 Determination of Stability in dry form.

6.7 Determination of Storage stability.

6.8 Determination of Surface tension.

6.9 Determination of matter insoluble in water.

7. Packaging

7.1 The product shall be packed in appropriate containers that do not affect or affect the product.

7.2 The product shall be packaged in hermetically seated enclosures which are capable of being resealed once opened, protecting the product from damage during transportation and storage.

8. Marking

Each container of product shall be legible and indelibly marked with the following information in Arabic or both Arabic and English language accordance with standard mentioned in item (2.3).

8.1 Name of the product.

8.2 Name and/or trade mark of the manufacturer.

8.3 Country of origin.

8.4 Expiry date when stored under normal conditions (20 – 30°C).

8.5 Production date and/or batch number.

8.6 Net weight package

8.7 Ingredients (can be in English only).

8.8 Directions for use

This product is primarily designed to remove beverage and other adsorbed food stains from plastic tableware by a simples soaking immersion.

8.8.1 All items to be destained should be washed clean before immersion.

8.8.2 Soaking tanks for destaining may be sinks, steel or porcelain tubs, or similar containers. Aluminium equipment should not be used.

8.8.3 For moderately to very heavily stained pieces, dissolve the compound in the ratio of 20 g/L of tap water maintained at a minimum temperature of 60°C. The destaining compound should be added to the water and not the reverse, to cut down undesirable foaming. Soak the pieces until destained (15 min to 1 h or longer). Additional soaking is not harmful. Precautions should be taken to prevent "nesting" of the tableware in the soaking tank.

8.8.4 For lightly stained tableware, the amount of compound may be reduced to 6 – 7 g/L.

8.8.5 The solution may be reused until it becomes ineffective.

8.8.6 Rinse tableware thoroughly after destaining.

8.9 Warning

REFERANCES

- EAS 817 Stain remover for tableware – Specification