
INTERNATIONAL STANDARD 4325

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Soaps and detergents — Determination of EDTA content (sequestering agent) — Titrimetric method

Savons et détergents — Dosage de l'EDTA (agent séquestrant) — Méthode titrimétrique

First edition — 1977-11-01

ITeH STANDARD PREVIEW
(standards.iteh.ai)

[ISO 4325:1977](https://standards.iteh.ai/catalog/standards/sist/8f68d6c5-119a-4a8e-a84e-cbb53dcc6770/iso-4325-1977)

<https://standards.iteh.ai/catalog/standards/sist/8f68d6c5-119a-4a8e-a84e-cbb53dcc6770/iso-4325-1977>

UDC 661.185./187 : 543.24

Ref. No. ISO 4325-1977 (E)

Descriptors : surfactants, soaps, detergents, chemical analysis, determination of content, EDTA, volumetric analysis.

Price based on 2 pages

Soaps and detergents — Determination of EDTA content (sequestering agent) — Titrimetric method

1 SCOPE

This International Standard specifies a titrimetric method for the determination of the content of the disodium salt of (ethylenedinitrilo)tetraacetic acid (EDTA), in soaps and other detergents.

2 FIELD OF APPLICATION

This method permits the determination of the disodium salt of (ethylenedinitrilo)tetraacetic acid (EDTA), in the presence of the trisodium salt of nitrilotriacetic acid (NTA), for contents higher than 0,1 % (*m/m*).

NOTE — However, in the presence of large amounts of NTA [more than 10 % (*m/m*)], interference may be produced.

3 REFERENCES

ISO 607, *Surface active agents — Detergents — Methods of sample division*.¹⁾

ISO . . . , *Soaps — Sampling*.²⁾

4 PRINCIPLE

Determination of the content of the disodium salt of (ethylenedinitrilo)tetraacetic acid by complexometric titration with a standard volumetric copper sulphate solution in the presence of the monosodium salt of 4-(2-pyridylazo)resorcinol.

5 REAGENTS

During the analysis, use only reagents of recognized analytical quality and only distilled water or water of equivalent purity.

5.1 Hydrochloric acid, approximately 5 N solution.

5.2 Copper sulphate, approximately 0,01 M standard volumetric solution.

Weigh, to the nearest 0,001 g, 2,497 g of copper(II) sulphate pentahydrate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$), minimal purity 99,5 %, and dissolve in water. Quantitatively transfer the solution obtained to a 1 000 ml one-mark volumetric flask, dilute to the mark and mix.

5.3 4-(2-Pyridylazo) resorcinol (PAR)³⁾, monosodium salt monohydrate, 1 g/l solution.

Dissolve 0,1 g of 4-(2-pyridylazo)resorcinol, monosodium salt monohydrate, in 100 ml of water.

6 APPARATUS

Ordinary laboratory apparatus, and

6.1 Microburette, of capacity 2 ml.

7 SAMPLING

The laboratory sample of soap or detergent shall be prepared and stored according to the instructions given in ISO . . . or ISO 607, respectively.

8 PROCEDURE

8.1 Test portion

Weigh, in a 250 ml beaker, to the nearest 0,001 g, approximately 10 g of the laboratory sample.

1) In preparation. (Revision of ISO/R 607.)

2) In preparation.

3) If reagent (PAR) is not available, it is permitted to use another reagent (PAN) [1-(2-pyridylazo)-2-naphthol], provided that this is stated in the test report.