SLOVENSKI STANDARD
SIST EN ISO 3735:1998

01-maj-1998

Surova nafta in kurilna olja - Določ evanje usedline - Metoda z ekstrakcijo (ISO 3735:1975)

Crude petroleum and fuel oils - Determination of sediment - Extraction method (ISO 3735:1975)

Rohöl und Heizöle - Bestimmung des Gehaltes an Sedimenten - Extraktionsverfahren (ISO 3735:1975)

Pétrole brut et fuel-oils - Détermination de la teneur en sédiments - Méthode par extraction (ISO 3735:1975)

Ta slovenski standard je istoveten z: **EN ISO 3735:1995**

ICS:

75.040	Surova nafta	Crude petroleum
75.160.20	Tekoč a goriva	Liquid fuels

SIST EN ISO 3735:1998 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 3735

October 1995

ICS 75.040; 75.160.20

Descriptors: petroleum products, crude oil, fuel oil, tests, measurement, sediments, extraction analysis

English version

Crude petroleum and fuel oils - Determination of sediment - Extraction method (ISO 3735:1975)

Pétrole brut et fuel-oils - Détermination de la teneur en sédiments - Méthode par extraction (ISO 3735:1975)

Rohöl und Heizöle - Bestimmung des Gehalts an Sedimenten - Extraktionsverfahren (ISO 3735:1975)

This European Standard was approved by CEN on 1995-09-09. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Ref. No. EN ISO 3735:1995 E

Foreword

The text of the International Standard from ISO/TC 28 "Petroleum products and lubricants" of the International Organization for Standardization (ISO) has been taken over as a European Standard by the Technical Committee CEN/TC 19 "Petroleum products, lubricants and related products".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 1996, and conflicting national standards shall be withdrawn at the latest by April 1996.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 3735:1975 has been approved by CEN as a European Standard without any modification.

INTERNATIONAL STANDARD 3735

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

Crude petroleum and fuel oils — Determination of sediment — Extraction method

Pétrole brut et fuel-oils — Détermination de la teneur en sédiments — Méthode par extraction

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3735 was drawn up by Technical Committee ISO/TC 28, *Petroleum products,* and circulated to the Member Bodies in October 1974.

It has been approved by the Member Bodies of the following countries :

Australia	Germany	Portugal
Austria	Ghana	Romania
Belgium	Hungary	South Africa, Rep. of
Brazil	India	Spain
Bulgaria	Iran	Sweden
Canada	Israel	Turkey
Chile	Japan	United Kingdom
Czechoslovakia	Netherlands	U.S.A.
France	Poland	Yugoslavia

No Member Body expressed disapproval of the document.

Printed in Switzerland

Crude petroleum and fuel oils — Determination of sediment — Extraction method

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method for the determination of sediment in crude petroleum and fuel oils by extraction with toluene.

2 REFERENCES

ISO 4793, *Laboratory apparatus — Filters — Porosity grading.* [1)]

ISO 5272, *Toluene — Specifications.* [1)]

3 PRINCIPLE

A test portion, in a refractory thimble, is extracted with hot toluene until the residue reaches constant mass. The mass of residue, calculated as a percentage, is reported as "sediment by extraction".

4 SOLVENT

Toluene, conforming to ISO 5272, grade 2.

CAUTION — Toluene is toxic. In particular, take precautions to avoid breathing the vapour, and protect the eyes.

5 APPARATUS

Extraction apparatus (see figures 1 and 2), consisting of the following :

5.1 Extraction flask : a wide-neck conical flask of 1 litre capacity.

5.2 Condenser, in the form of a metal coil approximately 25 mm in diameter and 50 mm in length attached to, and with the ends projecting through, a lid of sufficient diameter to cover the neck of the flask as shown in figure 1. The coil shall be made from stainless steel, tin, tin-plated copper or tin-plated brass tubing having an outside diameter of 5 to 8 mm and a wall thickness of approximately 1,5 mm. The tin coating shall have a minimum thickness of 0,075 mm. The exposed surface of the coil for cooling purposes is about 115 cm^2.

5.3 Extraction thimble, of a refractory porous material, pore size index P 16 (see ISO 4793), 25 mm in diameter by 70 mm in height, weighing not less than 15 g and not more than 17 g. The thimble shall be suspended from the condenser coil by means of a basket so that it hangs approximately mid-way between the surface of the extracting solvent and the bottom of the condenser coil.

5.4 Thimble basket, corrosion resistant, made of platinum, stainless steel, nickel-chromium alloy, or similar material and meeting the requirements of figure 2.

5.5 Water cup, for use when testing a sample having a high water content (see figure 1 b)). The cup shall be made of glass, conical in shape, approximately 20 mm diameter and 25 mm deep, having a capacity of approximately 3 ml. A glass hook fused on the rim at one side is so shaped that when hung on the condenser the cup hangs with its rim reasonably level.

In this procedure the thimble basket is suspended either as shown in figure 1 a), by means of the corrosion-resistant wire looped over the bottom of the condenser coil and attached to the basket supports, or as in figure 1 b), where the wire supports of the basket are attached to hooks soldered to the underside of the condenser lid.

5.6 Source of heat, suitable to vaporize toluene.

1) In preparation

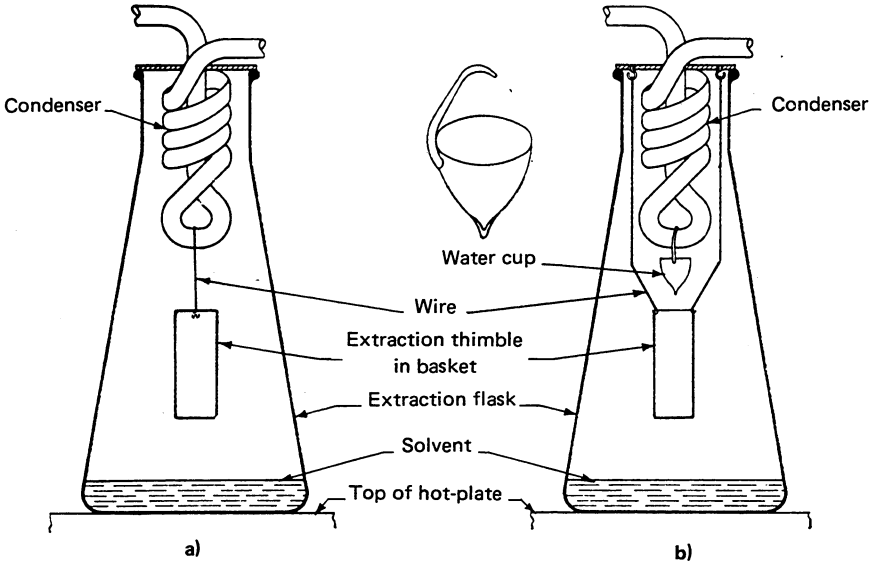

FIGURE 1 — **Extraction apparatus for determination of sediment showing in b) the water cup in position**

Dimensions in millimetres

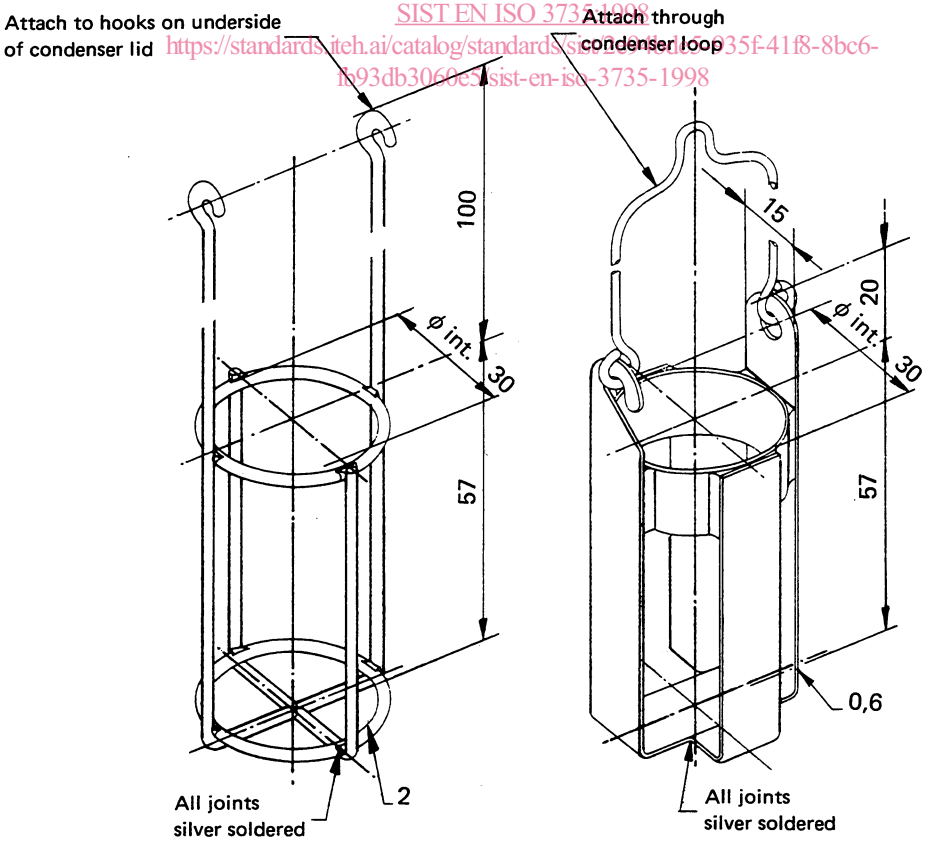

FIGURE 2 — **Basket thimble support**