INTERNATIONAL STANDARD

Second edition 1999-03-15

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

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



Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 3735 was developed by Technical Committee TC 28, *Petroleum products and lubricants*, Subcommittee 6, *Bulk cargo transfer, accountability, inspection and reconciliation*.

This second edition cancels and replaces the first edition (ISO 3735:1975), of which it constitutes a technical revision.

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

WARNING — The use of this International Standard may involve hazardous materials, operations and equipment. This International Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This International Standard specifies a method for the determination of sediment in crude petroleum and fuel oils by extraction with toluene. The precision applies a range of sediment levels from 0,01 % (m/m) to 0,40 % (m/m), although higher levels may be determined.

NOTE 1 If this International Standard is applied to cruce petroleum samples containing significant amounts of salts, an overestimation of the sediment content may be obtained because a proportion of the inorganic salts may be trapped in the extraction thimble. This problem is generally not significant for trude petroleum samples containing less than 0,1 % (m/m) total salts.

NOTE 2 For the purposes of this International Standard, the terms "(m/m)" and "(V/V)" are used to represent the mass and volume fractions of materials, respectively.

2 Normative references

The following standards contain provisions which, through reference pathis text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below, thembers of IEC and ISO maintain registers of currently valid International Standards.

ISO 1773:1997, Laboratory glassware — Narrow-necked boiling flasks.

ISO 3170:1988, Petroleum liquids — Manual sampling.

ISO 3171:1988, Petroleum liquids — Automatic pipeline sampling.

ISO 4793:1980, Laboratory sintered (fritted) filters — Porosity grading, classification and designation.

ISO 5272:1979, Toluene for industrial use — Specifications.

3 Principle

A test portion, in a refractory thimble, is extracted with hot toluene until the residue reaches constant mass.

