
INTERNATIONAL STANDARD



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Petroleum waxes — Determination of oil content

Cires de pétrole — Détermination de la teneur en huile

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FOREWORD

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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 2908 was drawn up by Technical Committee ISO/TC 28, *Petroleum products*, and circulated to the Member Bodies in March 1973.

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

Belgium	Iran	South Africa, Rep. of
Brazil	Israel	Sweden
Bulgaria	Mexico	Thailand
Canada	Netherlands	Turkey
Czechoslovakia	New Zealand	United Kingdom
France	Norway	U.S.A.
Germany	Poland	U.S.S.R.
Hungary	Portugal	
India	Romania	

No Member Body expressed disapproval of the document.

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Petroleum waxes — Determination of oil content

1 SCOPE AND FIELD OF APPLICATION

1.1 This International Standard specifies a test procedure for the determination of oil in petroleum waxes having a congealing point of 30 °C or higher as determined by ISO 2207 and containing not more than 15 % of oil.

NOTE — Difficulties can arise with some waxes of oil contents greater than 5 % due to the limited solubility of oil in methyl ethyl ketone which can lead to the formation of two liquid phases. If this occurs, the method is not applicable to the material under test.

1.2 The oil content of a wax may have significant effects on several of its properties, such as strength, hardness, flexibility, scuff resistance, coefficient of friction, coefficient of expansion, melting point, and oil staining. The importance of these effects may be dependent upon the ultimate use of the wax.

2 REFERENCE

ISO 2207, *Petroleum waxes — Determination of congealing point*.¹⁾

3 PRINCIPLE

The sample is dissolved in methyl ethyl ketone, cooled to – 32 °C to precipitate the wax, and filtered. The oil content of the filtrate is determined by evaporating the methyl ethyl ketone and weighing the residue.

4 SOLVENT

Methyl ethyl ketone, conforming to the following specification as determined by the specified or equivalent methods :

Property	Values	Methods ³⁾
Relative density 20/20 °C	0,805 to 0,807	2)
Colour	water white, 1,0 max.	IP 17 (B)
Distillation range	100 % between 78 and 81 °C	ASTM D 1078
Acidity	0,003 % (m/m) max. (expressed as acetic acid)	ASTM D 1613
Water content	not more than 0,3 % (m/m)	ASTM D 1364
Residue on evaporation	residue remaining after evaporation of 4 ml shall not exceed 0,1 mg	see procedure in 7.6
Refractive index at 20 °C	1,378 ± 0,002	ASTM D 1218

Store the solvent over anhydrous calcium sulphate (5 % (m/m) of the solvent).

Filter the solvent prior to use.

1) At present at the stage of draft.

2) A suitable method that is accurate to the third decimal place may be employed.

3) Substitution of the IP and ASTM method references by cross-references to appropriate International Standards will be made as soon as such International Standards become available.

5 APPARATUS

5.1 Filter stick and assembly, consisting of a 10 mm diameter sintered glass filter stick of porosity grade P16 (10 to 15 μm pore size index) as determined by the method given in the annex, provided with an air pressure inlet tube and delivery nozzle. It is provided with a ground glass joint to fit a 25 by 170 mm test tube. The dimensions for a suitable filtration assembly are shown in figure 1.

NOTE — A metallic filter stick may be employed if desired. A filter stick made of stainless steel and having a 12,7 mm disc of porosity grade P16 (10 to 15 μm pore size index) has been found to be satisfactory. The metallic apparatus is inserted into a 25 by 150 mm test tube and held in place by means of a cork.

Dimensions in millimetres

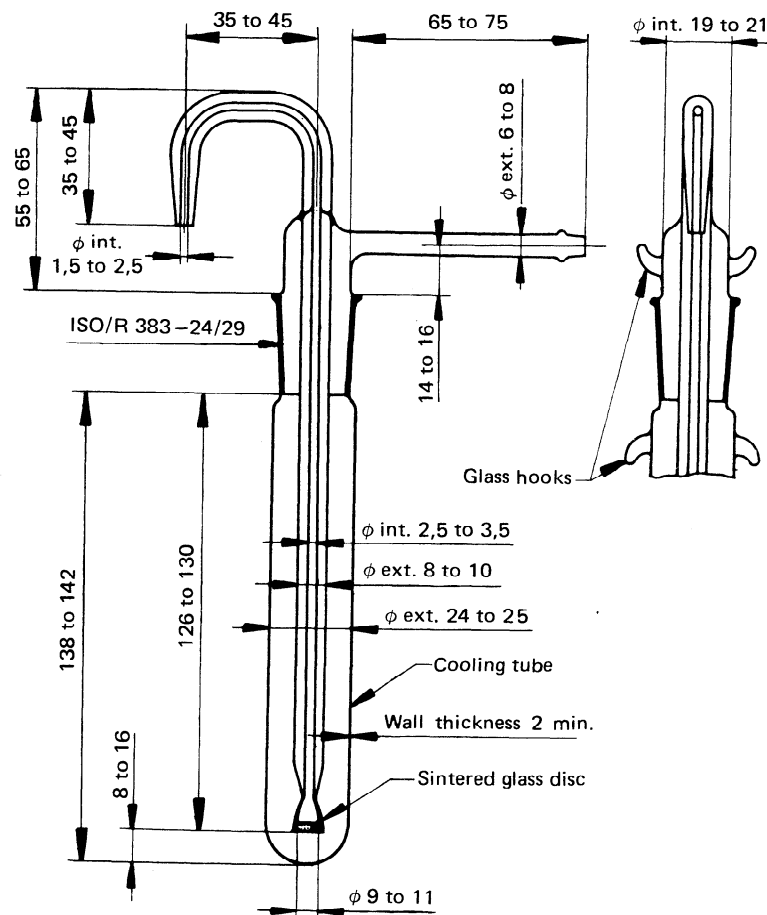


FIGURE 1 — Filter stick