INTERNATIONAL STANDARD 3517

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

Oil of neroli

Huile essentielle de néroli

First edition — 1975-12-15

UDC 668.526.452.004.1 **Ref. No. ISO 3517-1975 (E)**

Descriptors : essential oils, orange-flower, materials specifications.

Price based on 2 pages

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 3517 was drawn up by Technical Committee ISO/TC 54, *Essential oils,* and circulated to the Member Bodies in August 1974.

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

Belgium	India	Spain
Bulgaria	Netherlands	Turkey
Czechoslovakia	Portugal	Yugoslavia
France	South Africa, Rep. of	

No Member Body expressed disapproval of the document.

Printed in Switzerland

Oil of neroli

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies certain characteristics of oil of neroli, with a view to facilitating the assessment of its quality.

2 REFERENCES

ISO/R 210, *Essential oils — Packing.*

ISO/R 211, *Essential oils — Labelling and marking containers.*

ISO 212, *Essential oils — Sampling.*

ISO/R 279, *Determination of the density and relative density of essential oils.*

ISO/R 280, *Determination of the refractive index of essential oils.*

ISO/R 592, *Determination of the optical rotation of essential oils.*

ISO/R 709, *Determination of ester value and calculation of ester content of essential oils.*

ISO/R 875, *Determination of solubility of essential oils in ethanol.*

ISO 1242, *Essential oils — Determination of the acid value.*

3 DEFINITION

oil of "neroli" : The oil obtained by steam distillation of flowers of the bitter orange tree, *Citrus aurantium* Linnaeus subsp. *aurantium,* grown in France, in Italy and in North Africa.

4 REQUIREMENTS

4.1 Appearance

Clear, mobile liquid.

4.2 Colour

Pale yellow to amber with a slight blue fluorescence.

4.3 Odour

Characteristic, recalling that of the flowers of the bitter orange tree.

4.4 Relative density at 20/20 °C

	France	Italy	North Africa
Minimum ...	0,866	0,866	0,866
Maximum ...	0,871	0,879	0,876

4.5 Refractive index at 20 °C

	France	Italy	North Africa
Minimum ...	1,469 0	1,469 0	1,470 0
Maximum ...	1,474 0	1,474 0	1,474 0

4.6 Optical rotation at 20 °C

	France	Italy	North Africa
Range from	+ 1,5°	+ 2,5°	+ 6°
to	+ 7°	+ 11,5°	+ 11°

4.7 Solubility in diluted ethanol at 20 °C

1 volume of the French or Italian oil shall not require more than 2 volumes of 80 % (*V/V*) ethanol at 20 °C to give a clear solution. 1 volume of the North African oil shall not require more than 3,5 volumes of 85 % (*V/V*) ethanol at 20 °C to give a clear solution.

The solutions become turbid on further dilution with ethanol of the appropriate concentration and, on standing, they become clear with the formation of a deposit.

4.8 Acid value

Maximum : 2,0

4.9 Ester value

	France	Italy	North Africa
Minimum ...	25	20	28
Maximum ...	44	44	50

5 SAMPLING

See ISO 212.

Minimum volume of final sample : 15 ml.

6 METHODS OF TEST

6.1 Relative density at 20/20 °C

See ISO/R 279.

6.2 Refractive index at 20 °C

See ISO/R 280.

6.3 Optical rotation at 20 °C

See ISO/R 592.

6.4 Solubility in diluted ethanol at 20 °C

See ISO/R 875.

6.5 Acid value

See ISO 1242.

6.6 Ester value

See ISO/R 709.

7 PACKING, LABELLING AND MARKING

See ISO/R 210 and ISO/R 211.