



Edition: BP 2025 (Ph. Eur. 11.6 update)

Industrial Methylated Spirit

General Notices

Industrial Methylated Spirits; IMS
Industrial Denatured Alcohol

DEFINITION

Industrial Methylated Spirit is a mixture of nineteen volumes of ethanol of an appropriate strength with one volume of approved wood naphtha. Two strengths are available containing 99% by volume and 95% by volume of alcohol (also known as 74 OP and 66 OP respectively).

CHARACTERISTICS

A colourless, clear, mobile, volatile liquid, boiling at about 78°.

IDENTIFICATION

Mix 0.1 mL with 0.05 mL of an 11% w/w solution of orthophosphoric acid and 0.25 mL of dilute potassium permanganate solution. After 1 minute add a few mg of sodium metabisulfite and shake until the mixture is decolorised. Add 1.5 mL of a 50% v/v solution of sulfuric acid and a few mg of finely powdered chromotropic acid sodium salt, shake well and heat on a water bath for 5 minutes. A deep violet colour is produced.

TESTS

Acidity or alkalinity

25 mL requires not more than 0.2 mL of 0.1M sodium hydroxide VS to produce a pink colour with phenolphthalein solution R1 and not more than 1.0 mL of 0.1M hydrochloric acid VS to produce a red colour with methyl red solution.

Clarity of solution

Dilute 5.0 mL to 100 mL with water. The solution is *clear*, Appendix IV A.

Apparent density

For '66 OP' grade, not greater than 811.6 kg m^{-3} , and for '74 OP' grade, not greater than 792.8 kg m^{-3} , [Appendix V G](#).

Aldehydes

To 5.0 mL add 5 mL of [water](#) and 1 mL of [decolorised fuchsin solution](#) and allow to stand for 30 minutes. Any colour produced is not more intense than that obtained by treating in the same manner 5 mL of a 0.005% w/v solution of redistilled [acetaldehyde](#) in [aldehyde-free ethanol \(96%\)](#) (50 ppm).

Non-volatile matter

When evaporated and dried at 105° , leaves not more than 0.01% w/v of residue.