

BRITISH STANDARD

BS 506-1:1987

CONFIRMED  
APRIL 1993

# Methanol for industrial use —

## Part 1: Specification for methanol

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## 1 Scope

This British Standard specifies requirements for methanol suitable for industrial purposes.

NOTE The titles of the publications referred to in this standard are listed on inside back cover.

## 2 Description

The material shall be clear and free from matter in suspension, as assessed by visual inspection, and shall consist essentially of methanol, CH<sub>3</sub>OH.

## 3 Sampling and size of sample

A sample of not less than 1 L shall be taken in accordance with BS 506-2.

## 4 Colour

The colour of the material shall not exceed 15 Hazen units when measured as described in BS 5339.

## 5 Density

The density of the material at 20 °C shall be not lower than 0.791 g/mL and not higher than 0.794 g/mL when determined as described in BS 4522.

## 6 Distillation range

When the material is distilled as described in BS 4591, modified as specified in BS 506-2, the distillation range at 1 013 mbar<sup>1)</sup> pressure shall not exceed 1.0 °C and shall include the value 64.6 °C.

## 7 Residue on evaporation

The residue on evaporation on the material shall not exceed 0.001 % (*m/m*) when determined as described in BS 4524.

## 8 Miscibility with water

The material shall not show opalescence when mixed with distilled water as described in BS 506-2.

## 9 Alkalinity or acidity

The material shall not be alkaline to phenolphthalein and shall not contain more than 0.003 % (*m/m*) of acid, calculated as formic acid (HCOOH) and determined as described in BS 506-2.

## 10 Aldehydes and ketones

The material shall not contain more than 0.005 % (*m/m*) of aldehydes and ketones, calculated as acetone (CH<sub>3</sub>COCH<sub>3</sub>) and determined by the spectrometric method described in BS 506-2.

## 11 Sulphur compounds

The material shall not contain more than 0.0001 % (*m/m*) of sulphur compounds, calculated as S and determined as described in BS 506-2.

## 12 Permanganate test

The material shall not cause the colour of a standard potassium permanganate solution to fade sufficiently in 30 min to match or be lighter than the matching solution when tested as described in BS 506-2.

## 13 Water content

The material shall not contain more than 0.1 % (*m/m*) of water when determined as described in clause 2 of BS 2511:1970.

<sup>1)</sup> 1 mbar = 100 N/m<sup>2</sup> = 100 Pa.