



Institute for
Interlaboratory Studies

Certificate of Analysis

Reference Material MEOH-110717

Methanol

Reference Material MEOH-110717 consists of a 250 mL bottle with approximately 240 mL of Methanol (MEOH). This RM is intended primarily as a quality control material for use in the determination of Color Pt/Co, Density at 20°C, Specific Gravity 20/20°C, ASTM D1078 Distillation (IBP, 50% recovered and DP), Benzene and Ethanol.

Certified Property Values

The certified values are given in table 1 and have been derived from the results obtained from an international interlaboratory study in which 89 laboratories in 28 different countries participated. The results of this interlaboratory study are presented and discussed in the PT report iis17C09. A separate certification report about the RM evaluation can be ordered, see www.iisnl.com.

Table 1. Certified values for MEOH-110717

<u>Parameter</u>	<u>Certified value^a</u>
Color Pt/Co	2.01 ± 0.15
Density at 20°C, kg/L	0.79133 ± 0.00002
Specific Gravity 20/20°C	0.79274 ± 0.00002
IBP, °C	64.40 ± 0.03
50% rec., °C	64.50 ± 0.02
Dry Point, °C	64.85 ± 0.03
Benzene, mg/kg	10.0 ± 0.3
Ethanol, mg/kg	58.3 ± 1.3

a) The estimated uncertainty is given as 95% confidence limits, see the certification report.

b) The following values were also determined for this RM. These values are not certified, but for indication only.

Acidity as acetic acid, mg/kg	24.3 ± 1.86
Nonvolatile matter, mg/100mL	0.25 ± 0.03
Permanganate Time test at 15°C, min	81.2 ± 2.3
Purity "as received", %M/M	99.957 ± 0.002
Purity "on dry basis", %M/M	99.986 ± 0.001
Acetone, mg/kg	29.9 ± 0.9
Trimethylamine (TMA), µg/kg	82 ± 19
Water (Coulometric, ASTM E1064), mg/kg	289 ± 4.4
Water (Titrimetric, ASTM E203), mg/kg	302 ± 7.6

NOTICE AND WARNINGS TO USERS

Shelf life: The preparation of this RM was finished at July 11, 2017. When stored properly and unopened, the expiry date of this RM is **December 2023**. The validity of the RM bottles in stock is regularly verified by analytical testing by an ISO/IEC17025 accredited laboratory. If there is any doubt about the validity of the RM you are advised to contact iis (nl.iis@sgs.com).

Storage: Bottles should be stored in a dark and cool place, preferably at a temperature between +4°C and +10°C.

Suggested procedure for use of the RM as quality control sample: The contents must be mixed to ensure homogeneity before opening a bottle and taking a sample for analysis. Once the bottle has been opened, the material is susceptible to contamination (e.g. laboratory dust or water as methanol is hygroscopic) or losses. Certified values are not applicable to bottles stored after opening, even if resealed.

Safety handling instructions: Methanol is flammable. The flash point of the material of this RM is +12°C. Methanol is harmful if swallowed, therefore, care should be exercised during handling and use. Use proper methods for disposal of waste.

Spijkensisse, The Netherlands
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