Certificate of Analysis

Reference Material MEOH-110717

Methanol

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

Certified Property Values

The certified values are given in table 1. The certified values in table 1 have been derived from the results obtained from an international interlaboratory study in which 89 laboratories participated in 2017. The results of this interlaboratory study are presented and discussed in the report iis17C09, see www.iisnl.com.

Table 1. Certified values[b] for MEOH-110717.

Parameter	Reference value[a]	
Colour 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 (D1078), °C	64.40	± 0.03
50% rec. (D1078), °C	64.50	± 0.02
Dry Point (D1078), °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
b) The following values were also determined for this RM. These values are not certified, but for indication only:

Parameter	Reference valuea	
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, E1064), mg/kg	289	± 4.4
Water (Titrimetric, E203), mg/kg	302	± 7.6

NOTICE AND WARNINGS TO USERS

Shelf life: The preparation of this RM was finished November 30, 2017. When stored properly and unopened, the expiry date of this RM is **December 2020**. The validity of the RMs in stock is regularly verified by analytical testing by an ISO/IEC17025 accredited laboratory. In case of any doubt about the validity of the RM you are advised to contact the Institute for Interlaboratory Studies via www.iisnl.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:
Before opening a bottle and taking a sample for analysis, the contents must be mixed to ensure homogeneity. 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.

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