



LGC Standards Sp. z o.o.
ul. M. Konopnickiej 1
Dziekanów Leśny
05-092 Łomianki, Poland

Tel 48 22 751 31 40, 751 55 69
Fax 48 22 751 58 45
www.lgcstandards.com
pl@lgcstandards.com

Certificate of Reference Material

CRM PRG 7.20 Paraffin Oil - Refractive Index

Lot No: 720117
Date of certification: 31 January 2017
Valid to: 31 January 2019
Content: 10 ml in a plastic bottle
Storage: at room temperature

Certified values of refractive index:

Temperature:	Refractive index at wavelength 589,3 nm:
20 °C	$n_D = 1,47496 \pm 0,00002$
25 °C	$n_D = 1,47315 \pm 0,00002$
30 °C	$n_D = 1,47138 \pm 0,00002$

APPLICATION: This reference material is intended for checking and calibration of refractometers.

USE: A sample of the reference material should be placed into the prism of a refractometer according to the refractometer user's manual. At least three series of measurements, each consisting of five readings should be carried out. The sample should be disposed after use.

CHARACTERISTIC: The reference material was prepared of paraffin oil manufactured by Merck, Germany.

STABILITY: The stability of the reference material in storage conditions was tested.

CERTIFICATION: The n values of this lot of reference material were measured at the Laboratory of Length of the Central Office of Measures in Poland (Calibration certificate No. **M1-M12.4180.4.2017.33.1**).

TRACEABILITY: The values of refractive index stated in the certificate have been referred to national standard of refractive index unit maintained at the Central Office of Measures through application of Pulfrich refractometer.

UNCERTAINTY OF MEASUREMENT: The measurement uncertainty has been determined in accordance with EA 4/02 M:2013 Document. The reported expanded uncertainty is stated as the standard uncertainty multiplied by the coverage factor $k = 2$, which corresponds to a coverage probability of approximately 95%.

Signed:

Agnieszka Wojda
President of the Management Board