



Institute for  
Interlaboratory Studies

# Certificate of Analysis

Reference Material DEC-121107

**n-Decane**

Reference Material DEC-121107 consists of a 100 mL bottle with approximately 100 mL of pure (>96.5%) n-Decane. This RM is intended primarily as a quality control material for use in the determination of Flash Point in accordance with IP170, ASTM D56 and/or ASTM D3828.

## 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 125 laboratories in 60 different countries participated. The results of this interlaboratory study are presented and discussed in the PT report iis07J02. A separate certification report about the RM evaluation can be ordered, see [www.iisnl.com](http://www.iisnl.com).

**Table 1. Certified values<sup>b</sup> for DEC-121107.**

<u>Parameter</u>	<u>Certified value<sup>a</sup></u>
Flash Point IP170 / ISO13736, °C	49.6 ± 0.2
Flash Point ASTM D56, °C	50.9 ± 0.5
Flash Point ASTM D3828 / IP303 & IP523 / ISO3679, °C	48.9 ± 0.7

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

b) The following value was also determined for this RM. This value is not certified, but for indication only.

Flash Point ASTM D93, °C: 54.3 ± 2.7

## **NOTICE AND WARNINGS TO USERS**

**Shelf life:** The preparation of this RM was finished at November 12, 2007. When stored properly and unopened, the expiring 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](mailto:nl.iis@sgs.com)).

**Storage:** Bottles should be stored in a dark and cool place, preferably at a temperature between + 8°C and + 15°C.

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

**Safety handling instructions:** n-Decane is harmful if swallowed; therefore, care should be exercised during handling and use. Use proper methods for disposal of waste.

Spijkenisse, The Netherlands  
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