



Institute for  
Interlaboratory Studies

# Certificate of Analysis

Reference Material DSOX-041096

**o-Xylene**

Reference Material DSOX-041096 consists of a 60 mL crimp capped vial with approximately 55 mL of high purity o-Xylene. This RM is intended primarily as a quality control material for use in gas chromatographic methods for determination of the purity of o-Xylene.

## Certified Property Values

The certified values are given in table 1 and have been derived from the gas chromatographic results obtained from an international interlaboratory study in which 21 laboratories in 14 different countries participated. The results of this interlaboratory study are presented and discussed in the PT report iis96C03. 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 DSOX-041096.**

<u>Parameter</u>	<u>Certified value<sup>a</sup></u>
p-Xylene, %M/M	0.136 ± 0.004
m-Xylene, %M/M	0.778 ± 0.023
Ethylbenzene, %M/M	0.0127 ± 0.0009
Isopropylbenzene, %M/M	0.426 ± 0.012
Styrene, %M/M	0.0083 ± 0.0008
Ethyltoluenes, %M/M	0.0117 ± 0.0006
n-Propylbenzene, %M/M	0.0121 ± 0.0009

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

b) Also the following compounds are present in this RM. The concentrations of these compounds are not certified, but for indication only.

o-Xylene, %M/M:  $98.56 \pm 0.03$ ; other aromatics, %M/M:  $0.0016 \pm 0.0011$  and Nonaromatics, %M/M:  $0.046 \pm 0.009$

## **NOTICE AND WARNINGS TO USERS**

**Shelf life:** The preparation of this RM was finished at October 4, 1996. When stored properly and unopened, expire date of this RM is **December 2023**. The validity of the RM vials 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:** The sealed vial, as received, should be stored in a dark and cool place, preferably at a temperature between +10°C and +30°C.

**Suggested procedure for preparing a quality control sample:** The following procedure provides purity determination in accordance with ASTM D7504:2020.

1. Allow vial to equilibrate at a temperature of  $+23 \pm 3$  °C and shake gently for one minute.
2. Open the vial and transfer an amount of RM into a volumetric flask of 50 mL.
3. Add a known amount of the internal standard to be used into the volumetric flask and homogenise the mixture well.
4. Adjust the volume to 50 mL with RM from the vial.

**Safety handling instructions:** o-Xylene is considered to be harmful; therefore, care should be exercised during handling and use. Use proper methods for disposal of waste.

Spijkensisse, The Netherlands  
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