

## Certificate of Analysis

**Product Name:**  $\gamma$ -DECALACTONE  
analytical reference material  
**Product Number:** 93738  
**Batch Number:** BCBT0800  
**Brand:** Sigma-Aldrich  
**CAS Number:** 706-14-9  
**Formula:** C<sub>10</sub>H<sub>18</sub>O<sub>2</sub>  
**Formula Weight:** 170.25  
**Expiration Date:** OCT 2019  
**Quality Release Date:** 14 NOV 2016

TEST	SPECIFICATION	RESULT
Assay (QNMR)*	≥ 97.0 %	98.0 %
APPEARANCE (COLOR)	COLORLESS TO LIGHT YELLOW	COLORLESS
APPEARANCE (FORM)	LIQUID	LIQUID
PURITY (GC AREA %)	≥ 98.0 %	98.7 %
REFRACTIVE INDEX N <sub>20/D</sub>	1.447 - 1.451	1.449
WATER	≤ 0.5 %	0.06 %

\*The quantitative NMR (qNMR) value is **measured under ISO/ IEC 17025 accreditation** and the result is traceable to NIST SRMs. The assigned standard measurement uncertainty of the qNMR value is ≤0.5% relative.

Please note that qNMR values can differ from chromatographic purity values due to the presence of impurities/components (such as salts, water, residual solvents) which can not be detected by chromatographic methods. For quantification purposes, only the qNMR value should be used since it is a direct/primary assay (i.e. an "absolute purity") with respect to the organic component.



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Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.