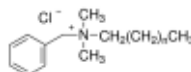


## Certificate of Analysis

Product Name:

Benzalkonium chloride -  $\geq 95.0\%$  ((calculated on dry substance), T)

Product Number: 12060  
Batch Number: BCCL3739  
Brand: SIAL  
CAS Number: 63449-41-2  
Quality Release Date: 14 FEB 2024



Test	Specification	Result
Appearance (Color)	White to Faint Green and White to Dark Yellow and White to Green-Yellow	Light Yellow
Appearance (Form)	Solid or Semi-Solid or Viscous Liquid	Viscous Liquid
Titration with AgNO <sub>3</sub> anhydrous	95.0 - 104.0 %	97.8 %
Titration with HClO <sub>4</sub> 360 eq. wt. (+/- 30)		368.0
Purity (HPLC) ~ 70 % Benzyltrimethylammonium Chloride	60.0 - 80.0 %	70.8 %
HPLC Minor Component 1 ~ 30 % Benzyltrimethylammonium Chloride	20.0 - 40.0 %	27.8 %
Solubility (Color)	Colorless to Very Faint Yellow	Colorless
Solubility (Turbidity) 1g in 10ml Water, hot	Clear	Clear
Water	$\leq 10\%$	5 %
Sulphated Ash	$\leq 0.1\%$	0.0 %
Infrared Spectrum	Conforms to Structure	Conforms

Dr. Reinhold Schwenninger  
Quality Assurance  
Buchs, Switzerland CH

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](http://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.

