

Certificate of Analysis

Haloacetic Acid Mixture

Product Number PHM-565-1 Page: 1 of 1

Lot Number: CR-0016 Lot Issue Date: 10-Jan-2017 Expiration Date: 28-Feb-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
trichloroacetic acid	000076-03-9	RM04580	$1004 \pm 5 \mu g/mL$
dibromoacetic acid	000631-64-1	RM01449	$1003 \pm 5 \mu g/mL$
chloroacetic acid	000079-11-8	RM04582	$1004 \pm 5 \mu g/mL$
dichloroacetic acid	000079-43-6	RM09938	$1005 \pm 5 \mu g/mL$
bromoacetic acid	000079-08-3	RM04589	$1004 \pm 5 \mu g/mL$

Matrix: methyl tert-butyl ether (MTBE)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ANAB A C C R E D I T E D ISO/IEC/17028 TESTING LABORATORY

ISO 9001 Registered TUV USA, Inc.

John Russo President

Monica Bourgeois Director of QA/RA