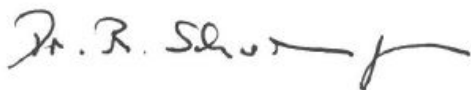


Certificate of Analysis

Product Name: CHLORAL HYDRATE
meets analytical specification of Ph. Eur., BP, USP, 99.5-101 %
Product Number: 15307
Batch Number: BCBX6060
Brand: Sigma-Aldrich
CAS Number: 302-17-0
Formula: $\text{Cl}_3\text{CCH}(\text{OH})_2$
Formula Weight: 165.40
Quality Release Date: 25 JUL 2018
Recommended Retest Date: DEC 2021

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS OR WHITE	WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	POWDER
TITRATION	99.5 - 101.0 %	99.7 %
TITRATION (METHOD)	ACIDIMETRIC	ACIDIMETRIC
SOLUBILITY (COLOR)	COLORLESS	COLORLESS
SOLUBILITY (TURBIDITY)	CLEAR	CLEAR
SOLUBILITY (METHOD)	1G IN 10ML WATER	1G IN 10ML WATER
PH	3.5 - 5.5	4.9
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS
PHARMACOPOEA TESTS	SULFATED ASH $\leq 0.1\%$ ACIDITY COMPLYING CHLORIDE $\leq 70\text{MG/KG}$ REACTION AGAINST H_2SO_4 COMPLYING NON-VOLATILE MATTER $\leq 0.1\%$ HEAVY METALS (AS PB) $\leq 20\text{ MG/KG}$ CHLORAL ALCOHOLATE COMPLYING	CORRESPONDS TO PH.EUR.
RESIDUAL SOLVENTS (GLC-HS)	COMPLYING	COMPLYING



Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland

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.