Chloramphenicol
Sigma Reference Standard

Product Number C6455
Lot Number 086K8803
Storage Temperature 2–8 °C

CAS RN 56-75-7
Synonyms: d-threo-(–)-2,2-Dichloro-N-[β-hydroxy-α-(hydroxymethyl)-p-nitrophenethyl]acetamide;
Acetamide, 2,2-dichloro-N-[2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]-, [R-(R*,R*)]-

Product Description
Molecular Formula: C₁₁H₁₂Cl₂N₂O₅
Molecular Weight: 323.13

This product meets USP specifications (Current through USP 29, 2nd Supplement) and is traceable to USP Reference Standard lot N1C074.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Do not dry before using.

Storage/Stability
Store the product at 2–8 °C. Keep container tightly closed. Store in a cold dry place.

Test | USP 29 Specifications | Result | Sigma R.S. Lot 086K8803
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Infrared absorption spectrum KBr dispersion <197K> | compares to standard | conforms to USP RS lot N1C074
Identification B high pressure liquid chromatography <621> | retention time of the major peak of the chromatogram in the Assay preparation corresponds to the major peak in the Standard preparation as obtained in the Assay | corresponds
Melting range <741> | between 149 – 153 °C | 149.5 – 151.5 °C
Specific rotation <781S> 50 mg, undried, per mL, in dehydrated alcohol | between +17.0° and +20.0° | +19.81°
Crystallinity <695> | meets requirements | passes
pH <791> | between 4.5 and 7.5, in an aqueous suspension containing 25 mg | 6.29
Chromatographic purity | no impurity greater than 1% and the sum of all impurities does not exceed 2% | passes
Assay high performance liquid chromatography <621> | not less than 97.0 percent and not more than 103.0. percent | 97.7%

See reverse side for IR spectrum of Sigma Reference Standard.
INFRARED SPECTRUM  

KBr dispersion

Wavenumbers (cm$^{-1}$)

Transmittance %

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