

Status: Currently Official on 15-Feb-2025
Official Date: Official Prior to 2013
Document Type: USP Monographs
DocId: GUID-0F0082DB-780D-4ECC-A54D-F59B311E7D1E_1_en-US
DOI: https://doi.org/10.31003/USPNF_M41800_01_01
DOI Ref: ke0tx

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Iodoform

CHI_3 393.73

Triiodomethane CAS RN®: 75-47-8; UNII: KXI2J76489.

DEFINITION

Iodoform, previously dried over silica gel for 24 h, contains NLT 99.0% and NMT 100.5% of iodoform (CHI_3).

IDENTIFICATION

• A.

Sample: 0.1 g

Analysis: Heat the *Sample*.

Acceptance criteria: A purple gas is evolved.

ASSAY

• PROCEDURE

Sample: 200 mg of Iodoform, previously dried over silica gel for 24 h

Titrimetric system

(See [Titrimetry \(541\)](#).)

Mode: Residual titration

Titrant: 0.1 N silver nitrate VS

Back-titrant: 0.1 N ammonium thiocyanate VS

Endpoint detection: Visual

Analysis: Transfer the *Sample* to a 500-mL glass-stoppered conical flask. Add 20 mL of alcohol, and swirl to dissolve. Add 30.0 mL of *Titrant* and 10 mL of nitric acid, insert the stopper, and allow it to stand in a dark place for 16 h. Add 150 mL of water and 5 mL of ferric ammonium sulfate TS, and titrate the excess silver nitrate with *Back-titrant*. Perform a blank determination. Each mL of 0.1 N silver nitrate is equivalent to 13.124 mg of iodoform (CHI_3).

Acceptance criteria: 99.0%–100.5% on the previously dried basis

IMPURITIES

• [RESIDUE ON IGNITION \(281\)](#): NMT 0.1%

• [CHLORIDE AND SULFATE, Chloride \(221\)](#)

Sample solution: 3.0 g of powdered Iodoform in 75 mL of water. Shake this solution for 1 min, allow to stand, and filter the supernatant. Use the filtrate for the analysis of Chloride and Sulfate.

Analysis: To 25 mL of the *Sample solution* add 6 mL of 3 N nitric acid, and dilute with water to 40 mL.

Acceptance criteria: 0.011%; this solution shows no more chloride than corresponds to 0.15 mL of 0.020 N hydrochloric acid.

• [CHLORIDE AND SULFATE, Sulfate \(221\)](#)

Sample solution: Use as directed in the analysis of Chloride.

Analysis: To 25 mL of the *Sample solution* obtained in the test for *Chloride* add 1 mL of 3 N hydrochloric acid, and dilute with water to 40 mL.

Acceptance criteria: 0.017%; this solution shows no more sulfate than corresponds to 0.17 mL of 0.020 N sulfuric acid.

SPECIFIC TESTS

• [LOSS ON DRYING \(731\)](#)

Analysis: Dry over silica gel for 24 h.

Acceptance criteria: NMT 0.5%

• **COLORING MATTER, ACIDS, AND ALKALIES**

Sample: 2 g

Analysis: Shake the *Sample* with 5 mL of water for 1 min, and filter.

Acceptance criteria: The filtrate is colorless and is neutral to litmus.

ADDITIONAL REQUIREMENTS

- **PACKAGING AND STORAGE:** Preserve in tight, light-resistant containers, store at controlled room temperature, and prevent exposure to excessive heat.
- **LABELING:** Label it to indicate that it is intended for use in compounding dosage forms for topical, periodontal, nasal, and intracavitary use only.

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
IODOFORM	Documentary Standards Support	SM12020 Small Molecules 1

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. PF 32(1)

Current DocID: GUID-0F0082DB-780D-4ECC-A54D-F59B311E7D1E_1_en-US

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