

Status: Currently Official on 15-Feb-2025
Official Date: Official Prior to 2013
Document Type: USP Monographs
DocId: GUID-29C1CC78-6E68-4B2B-9570-3B309B1B7239_2_en-US
DOI: https://doi.org/10.31003/USPNF_M38720_02_01
DOI Ref: d0ss6

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Hydroquinone Cream

» Hydroquinone Cream contains not less than 94.0 percent and not more than 106.0 percent of the labeled amount of hydroquinone ($C_6H_6O_2$).

Packaging and storage—Preserve in well-closed, light-resistant containers.

USP REFERENCE STANDARDS (11)—

[USP Hydroquinone RS](#)

Identification—Dissolve a portion of Cream equivalent to about 50 mg of hydroquinone, in a mixture of equal volumes of methanol and chloroform to make 50 mL: a 5-μL portion of this solution responds to [Identification](#) test [B](#) under [Hydroquinone](#).

MINIMUM FILL (755): meets the requirements.

Assay—

Standard preparation—Dissolve a suitable quantity of [USP Hydroquinone RS](#) in methanol, and dilute quantitatively and stepwise with methanol to obtain a solution having a known concentration of about 10 μg per mL.

Assay preparation—Transfer an accurately weighed portion of Cream, equivalent to about 20 mg of hydroquinone, to a 100-mL beaker. Triturate the Cream with 50 mL of methanol, and pass the liquid through folded filter paper, previously washed with methanol, into a 500-mL volumetric flask. Repeat the trituration and filtration. Dilute, by washing the contents of the filter paper with methanol through the paper into the volumetric flask, to volume, and mix. Pipet 25 mL of this solution into a 100-mL volumetric flask, add methanol to volume, and mix.

Procedure—Concomitantly determine the absorbances of the *Standard preparation* and the *Assay preparation* in 1-cm cells at the wavelength of maximum absorbance at about 293 nm, with a suitable spectrophotometer, using methanol as the blank. Calculate the quantity, in mg, of hydroquinone ($C_6H_6O_2$) in each g of the Cream taken by the formula:

$$2000(C/W)(A_U/A_S)$$

in which C is the concentration, in mg per mL, of [USP Hydroquinone RS](#) in the *Standard preparation*; W is the weight, in g, of Cream taken; and A_U and A_S are the absorbances of the *Assay preparation* and the *Standard preparation*, respectively.

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

Topic/Question	Contact	Expert Committee
HYDROQUINONE CREAM	Documentary Standards Support	SM32020 Small Molecules 3

Chromatographic Database Information: [Chromatographic Database](#)

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Pharmacopeial Forum: Volume No. PF 27(1)

Current DocID: GUID-29C1CC78-6E68-4B2B-9570-3B309B1B7239_2_en-US
Previous DocID: GUID-29C1CC78-6E68-4B2B-9570-3B309B1B7239_1_en-US
DOI: https://doi.org/10.31003/USPNF_M38720_02_01
DOI ref: [d0ss6](#)