

Lot: 9010218

CHEMISCHE FABRIK BERG Gesellschaft
mit beschränkter Haftung

Chemische Fabrik Berg GmbH, Mainthalstraße 3, 06749 Bitterfeld-Wolfen, Germany, Tel.: +49-(0)3493-78180

Analysenzertifikat / Certificate of analysis

Produkt / Product 5-Fluorouracil (Ph.Eur. 9 th Ed.)	Batch No.: 20126 / 1703B246
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The test parameters and the requirements follow the agreed specification unless indicated otherwise:
SPEC-Pr.-No. 20126/5 (valid Nov. 04th, 2014).

The analysis was made available by the manufacturer unless indicated otherwise.

Methode / Method	Anforderungen / Requirements	Ergebnisse / Results
Ph. Eur.		
Appearance	white or almost white crystalline powder	conforms
Identification (IR)	positive	positive
Assay (titration)	98.5 – 101.0 %	99.7 %
Appearance of solution (0.5 g / 50 ml aqueous solution)	clear, not more intensely coloured than reference solution BY ₇ or Y ₇	conforms
pH (0.5 g / 50 ml aqueous solution)	4.5 – 5.0	4.8
Heavy metals	20 ppm maximum	< 20 ppm
Loss on drying	0.5 % maximum	< 0.1 %
Sulphated ash	0.1 % maximum	< 0.1 %
Related substances (TLC)		
2-Ethoxy-5-fluorouracil	0.25 % maximum	< 0.25 %
Urea	0.1 % maximum	< 0.1 %
Related substances (HPLC)		
Barbituric acid	0.1 % maximum	< 0.1 %
5-Hydroxyuracil	0.1 % maximum	< 0.1 %
Uracil	0.1 % maximum	< 0.1 %
5-Methoxyuracil	0.1 % maximum	< 0.1 %
5-Chlorouracil	0.1 % maximum	< 0.1 %
Each unspecified impurity	0.10 % maximum	< 0.05 %
Total impurities	0.5 % maximum	< 0.1 %
Additional tests (not specified)		
Bacterial endotoxines*	0.048 maximum	< 0.01 IU/mg
Microbiology*		
TAMC	100 cfu/g maximum	< 100 cfu/g
TYMC	10 cfu/g maximum	< 10 cfu/g
Manufacturing date:	03 / 2017	
Release date:	07 / 2017	
Retest date:	03 / 2022	

* test performed at external laboratory

Dr. Raschke / QC
Name / Department


Signature / Unterschrift

04/07/2017
Date / Datum

Certificate of analysis

Produkt / Product 5-Fluorouracil (USP 40)	Batch No.: 20126 / 1703B246
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The test parameters and the requirements follow the agreed specification unless indicated otherwise: **SPEC-Pr.-No. 20126/3 – USP** (valid Oct. 16th, 2014). The analysis was made available by the manufacturer unless indicated otherwise.

Method	Requirements	Results
USP		
Appearance	white to practically white, crystalline powder	conforms
<u>Identification</u>		
<i>Infrared Absorption</i>	conforms	conforms
<i>Ultraviolet Absorption</i>	conforms	conforms
<i>Retention time (HPLC)</i>	conforms	conforms
Residue on ignition	≤ 0.1 %	< 0.1 %
Heavy metals	≤ 20 ppm	< 20 ppm
Loss on drying	≤ 0.5 %	< 0.1 %
<u>Organic impurities (HPLC)</u>		
<i>Related compound A (Barbituric acid)</i>	≤ 0.15 %	< 0.05 %
<i>Related compound B (5-Hydroxyuracil)</i>	≤ 0.15 %	< 0.05 %
<i>Related compound C (Uracil)</i>	≤ 0.15 %	< 0.05 %
<i>Related compound D (5-Methoxyuracil)</i>	≤ 0.15 %	< 0.05 %
<i>Related compound E (5-Chlorouracil)</i>	≤ 0.15 %	< 0.05 %
<i>Any individual unspecified impurity</i>	≤ 0.10 %	< 0.05 %
<i>Total impurities</i>	≤ 0.5 %	< 0.1 %
<u>Related compound F and Urea</u>		
<i>Related compound F (2-Ethoxy-5-fluorouracil)</i>	≤ 0.25 %	< 0.25 %
<i>Urea</i>	≤ 0.2 %	< 0.1 %
Assay (calc. on dried basis)	98.0 – 102.0 %	99.7 %
<u>Additional tests</u> (Not specified)		
Bacterial endotoxines*	0.048 maximum	< 0.01 IU/mg
<u>Microbiology</u> *		
<i>TAMC</i>	≤ 100 cfu/g	< 100 cfu/g
<i>TYMC</i>	≤ 10 cfu/g	< 10 cfu/g
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