

## Certificate of Analysis

**Product name:** **Dutasteride**  
**Number of analysis:** T0007324  
**Batch number / Weight:** **22E13-H07-00823 / 1g**  
**Producer / Producer Batch Number:** Hetero Labs (Unit-I)/DR2103005  
**Analysed according to:** **USP 43**

| Tests                                     | Requirement                 | Result  | Unit | Standard remark       |
|---|-----------------------------|---------|------|-----------------------|
| Appearance                                | White or pale yellow powder | Conform |      |                       |
| Identification A                          | Conform                     | Conform |      | IR-spectrum           |
| Identification B                          | Conform                     | Conform |      | HPLC                  |
| Residue on ignition                       | <= 0,1                      | 0,1     | %    | HPLC                  |
| Residual solvents                         | Conform                     | Conform |      | GC                    |
| Acetonitrile                              | <= 0,3                      | 0,0     | %    | GC                    |
| Ethyl acetate                             | <= 0,2                      | 0,2     | %    | GC                    |
| 1,4-Dioxane                               | <= 0,1                      | 0,0     | %    | GC                    |
| Heptane                                   | <= 0,5                      | 0,4     | %    | GC                    |
| Pyridine                                  | <= 0,2                      | 0,0     | %    | GC                    |
| Toluene                                   | <= 0,2                      | 0,0     | %    | GC                    |
| Organic impurities                        | Conform                     | Conform |      | HPLC; Procedure 1     |
| Dutasteride dimethylamide                 | <= 0,2                      | 0,0     | %    | HPLC; Procedure 1     |
| Dutasteride methyl ester                  | <= 0,15                     | 0,0     | %    | HPLC; Procedure 1     |
| Dutasteride ethyl ester                   | <= 0,2                      | 0,0     | %    | HPLC; Procedure 1     |
| Dutasteride 17-a-5-ene                    | <= 0,2                      | 0,0     | %    | HPLC; Procedure 1     |
| Dutasteride 17a-epimer                    | <= 0,3                      | 0,0     | %    | HPLC; Procedure 1     |
| Chlorodutasteride                         | <= 0,4                      | 0,0     | %    | HPLC; Procedure 1     |
| Dutasteride 5-ene                         | <= 0,3                      | 0,0     | %    | HPLC; Procedure 1     |
| Any other individual unspecified impurity | <= 0,1                      | 0,0     | %    | HPLC; Procedure 1     |
| Organic impurities                        | Conform                     | Conform |      | HPLC; Procedure 2     |
| Dihydrodutasteride                        | <= 0,15                     | 0,0     | %    | HPLC; Procedure 2     |
| Dutasteride a-dimer                       | <= 0,3                      | 0,0     | %    | HPLC; Procedure 2     |
| Dutasteride b-dimer                       | <= 0,5                      | 0,0     | %    | HPLC; Procedure 2     |
| Any other individual unspecified impurity | <= 0,1                      | 0,0     | %    | HPLC; Procedure 2     |
| Total impurities                          | <= 2,0                      | 0,0     | %    | HPLC; Procedure 1 & 2 |
| Water                                     | <= 0,5                      | 0,15    | %    |                       |
| Specific optical rotation                 | 15,0 - 25,0                 | 20,0    | °    |                       |
| Assay                                     | 97,0 - 102,0                | 99,5    | %m/m | HPLC                  |
| TSE/BSE-statement                         | Conform                     | Conform |      | DP                    |

Analysis performed by the authorized internal lab and by Fagron Inc.



Release:  
Konstantina Tziolia  
Pharmacist - QA Manager / QP

16/05/2022

Expiration: 02-2026

Conclusion: APPROVED

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