

CERTIFICATE of ANALYSIS

11- α -HYDROXIPROGESTERONE

BATCH No.: C0373/0 19010

MAN DATE: Sep/19

RE-TEST DATE: Sep/24

COUNTRY OF ORIGIN: SPAIN

| TEST | SPECIFICATIONS | RESULTS |
|--------------------------------|---|--|
| 1. Description | White to almost white crystalline powder | Complies |
| 2. Identification | | |
| 2.1. IR | According to reference standard | Complies |
| 2.2. HPLC | According to reference standard | Complies |
| 3. Loss on drying | $\leq 1.0 \%$ | 0.1 % |
| 4. Specific optical rotation | $+175.0^\circ$ to $+182.0^\circ$ ($c=1$; CHCl_3 ; 25°C) | $+180.6^\circ$ |
| 5. Residue on ignition | $\leq 0.10\%$ | $< 0.10 \%$ |
| 6. Heavy Metals | $\leq 10 \text{ ppm}$ | $< 10 \text{ ppm}$ |
| 7. Molybdenum | $\leq 25 \text{ ppm}$ | $< 25 \text{ ppm}$ |
| 8. HPLC chromatographic purity | $\text{I0373-01} \leq 0.15 \%$ $\text{I0373-02} \leq 0.15 \%$ $\text{I0373-03} \leq 0.15 \%$ $\text{I0373-04} \leq 0.15 \%$ $\text{I0373-05} \leq 0.15 \%$ Unknown $\leq 0.10 \%$ Total $\leq 1.0 \%$ | $< 0.05 \%$ $< 0.05 \%$ $< 0.05 \%$ $< 0.05 \%$ $< 0.05 \%$ $< 0.05 \%$ 0.00 % |
| 9. HPLC Assay (dried basis) | 98.0 – 102.0 % | 100.0 % |
| 10. Residual solvents | Methanol $< 3000 \text{ ppm}$ Ethyl Acetate $< 5000 \text{ ppm}$ Tetrahydrofuran $< 720 \text{ ppm}$ Methyl-THF $< 5000 \text{ ppm}$ | $< \text{LOQ}^*$ 2555 ppm $< \text{LOD}^{**}$ $< \text{LOD}^{**}$ |

GMP Compliance Declaration/Certificate of Compliance: Crystal Pharma, S.A.U. hereby certify that the information contained in this CoA/CoC is authentic and accurate. This batch has been manufactured and packaged at the above mentioned site in full compliance with GMP requirements of the local Regulatory Authority, applicable laws or regulations and tested according to the approved product specification. The Manufacturing Batch Records, packaging and analysis records have been reviewed, released and found to be in compliance with GMP requirements.

*LOQ: Limit of quantitation

**LOD: Limit of detection



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16/10/19

Quality Assurance Department

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