

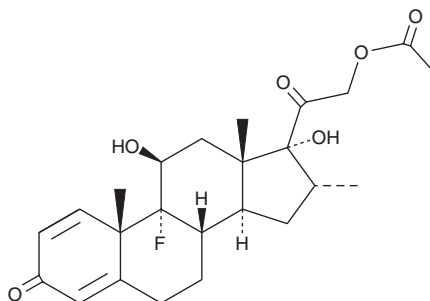
PRODUCT INFORMATION



Dexamethasone Acetate

Item No. 22286

CAS Registry No.: 1177-87-3
Formal Name: (11 β 16 α)-21-(acetyloxy)-9-fluoro-11,17-dihydroxy-16-methylpregna-1,4-diene-3,20-dione
Synonym: NSC 39471
MF: C₂₄H₃₁FO₆
FW: 434.5
Purity: \geq 98%
UV/Vis.: λ_{max} : 239 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Dexamethasone acetate is supplied as a crystalline solid. A stock solution may be made by dissolving the dexamethasone acetate in the solvent of choice. Dexamethasone acetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of dexamethasone acetate in these solvents is approximately 3, 30, and 25 mg/ml, respectively.

Dexamethasone acetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, dexamethasone acetate should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Dexamethasone acetate has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Dexamethasone acetate is an acetate form of the synthetic glucocorticoid dexamethasone (Item No. 11015). It has a longer duration of action than dexamethasone and its water-soluble form, dexamethasone phosphate (Item No. 20340).¹ Injectable and topical formulations containing dexamethasone acetate have been used to treat inflammation associated with carpal tunnel syndrome, ocular keratitis, asthma exacerbations, and infertility in men.²⁻⁵

References

1. Dreyer, S.J. and Beckworth, W.J. Commonly used medications in procedures. *Pain Proc. Clin. Prac.* **3**, 5-12 (2011).
2. Gries, D.M., Moffitt, D.R., Pulos, E., *et al.* A single dose of intramuscularly administered dexamethasone acetate is as effective as oral prednisone to treat asthma exacerbations in young children. *J. Pediatr.* **136(3)**, 298-303 (2000).
3. Leibowitz, H.M., Kupferman, A., Stewart, R.H., *et al.* Evaluation of dexamethasone acetate as a topical ophthalmic formulation. *Am. J. Ophthalmol.* **86(3)**, 418-423 (1978).
4. Moghtaderi, A.R., Moghtaderi, N., and Loghmani, A. Evaluating the effectiveness of local dexamethasone injection in pregnant women with carpal tunnel syndrome. *J. Res. Med. Sci.* **16(5)**, 687-690 (2011).
5. De Almeida, M. and Jouannet, P. Dexamethasone therapy of infertile men with sperm autoantibodies: Immunological and sperm follow-up. *Clin. Exp. Immunol.* **44(3)**, 567-575 (1981).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM