Desonide
Item No. 21368

CAS Registry No.: 638-94-8
Formal Name: \((1\beta,16\alpha)-11,21\text{-dihydroxy}-16,17\text{-}(1\text{-methylethylidene})\text{bis(oxy)})\text{-pregna-1,4-diene-3,20-dione}\)
Synonym: Budesonide acetonide
MF: \(C_{24}H_{32}O_6\)
FW: 416.5
Purity: \(\geq 98\%\)
UV/Vis.: \(\lambda_{\text{max}}: 243\text{ nm}\)
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Desonide is supplied as a crystalline solid. A stock solution may be made by dissolving the desonide in the solvent of choice. Desonide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of desonide in these solvents is approximately 10, 25, and 20 mg/ml, respectively.

Desonide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, desonide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Desonide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Desonide is a synthetic corticosteroid.\(^1\) It is a nonfluorinated analog of triamcinolone acetonide (Item No. 18026). Formulations containing desonide are used topically to reduce inflammation in conditions that include allergic reactions and psoriasis.\(^1,2\)

References