(S)-Ketorolac
Item No. 11348

CAS Registry No.: 66635-92-5
Formal Name: (1S)-5-benzoyl-2,3-dihydro-1H-pyrrolizine-1-carboxylic acid
Synonym: (-)-Ketorolac
MF: C15H13NO3
FW: 255.3
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \): 245, 312 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

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

Laboratory Procedures

(S)-Ketorolac is supplied as a crystalline solid. A stock solution may be made by dissolving the (S)-ketorolac in the solvent of choice, which should be purged with an inert gas. (S)-Ketorolac is soluble in the organic solvent ethanol at a concentration of approximately 1 mg/ml. (S)-Ketorolac is slightly soluble in chloroform and methanol.

Description

(S)-Ketorolac is a non-selective COX inhibitor and non-steroidal anti-inflammatory drug (NSAID; \( IC_{50} = 0.1 \) and 2.7 \( \mu M \) for COX-1 and COX-2, respectively).\(^1\) (S)-Ketorolac is approximately twice as potent as the racemic mixture (Item No. 9001148) and 60 times more potent than (R)-ketorolac in a rat pain assay.\(^2\) (S)-Ketorolac is cleared from rat kidney and liver more quickly than (R)-ketorolac.\(^3\) Formulations containing ketorolac have been used to manage postoperative pain as well as an ophthalmic solution to treat ocular pain and inflammation.\(^4\)

References