(S)-(+)-3-QUINUCLIDINOL





PRODUCT IN FOCUS



(S)-(+)-3-Quinuclidinol

INTRODUCTION

Racemic quinuclidinol is an off-white solid that possesses medicinal properties. It is an alkaloid abundant in nature, especially in *Erythroxylum coca*. Synthetically manufactured product finds usage in APIs, intermediates, and medicinal chemistry.

Manufacture

It is commercially manufactured by optical resolution of 3-quinuclidinol, the by-product being (R)-(-)-3-quinuclidinol.

Synonym	S-3-Quinuclidinol (S)-3-Hydroxyquinuclidine (3S)-1-Azabicyclo[2.2.2]octan-3-ol	
CAS no.	34583-34-1	
EINECS no.	681-383-7	
Molecular formula	C ₇ H ₁₃ NO	
Molecular weight	127.18	

Applications

APIs

Quinuclidinol is used in the manufacture of:

- Umeclidinium, to treat shortness of breath
- Penehyclidine HCl, a selective anticholinergic
- Solifenacin succinate, an antimuscarinic agent

Intermediates

Others

- As reagent in chemoselective alpha-iodination of acrylic esters and for cleavage of beta-keto esters
- As synthon for preparation of cholinergic receptor ligands and anesthetics

Structure

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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Cream coloured to off-white solid
Melting range	°C	210.0 – 220.0
LOD at 50 °C	%	Max 1.0
Purity by GC	%	Min 95.0
Purity by Chiral HPLC	%	Min 99.0

STORAGE

Stored at ambient temperature.

PACKING

25 kg UN approved HDPE drum.

REACH Status

Not registered yet.

No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please contact us.