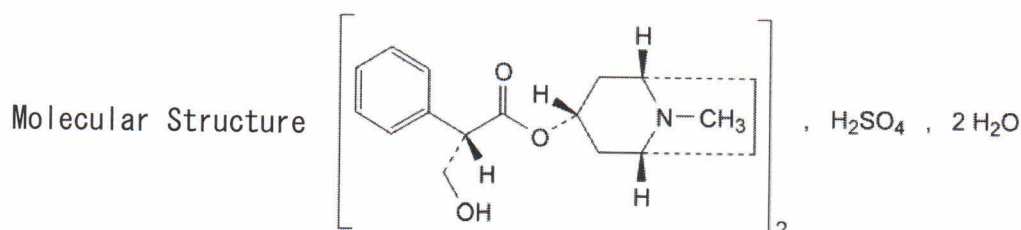


Batch no 20240101  
 Mf date Jan 05 2024  
 Retest Jan 04 2027



Molecular Formula C<sub>34</sub>H<sub>48</sub>N<sub>2</sub>O<sub>10</sub>S · 2H<sub>2</sub>O  
 Molecular Weight 713  
 CAS Registry Number 620-61-1

Apr 11 2024

Tests	Specifications	Results	
Appearance	White or almost white crystalline powder or colourless needles	Almost white crystalline powder	
Identification	IR, RRT, reaction of sulphates	Positive	
Melting range	187.0 ~ 194.0°C	188.4 ~ 193.6°C	
pH	4.5 ~ 6.2	5.5	
Specific optical rotation	-24 ~ -29°	-28.5°	
Water	2.0 ~ 5.5%	3.2%	
Residue on ignition	≤ 0.1%	0.03%	
Chromatographic purity	DL-Tropic acid	≤ 0.2%	< 0.05%
	7-Hydroxyhyoscyamine	≤ 0.2%	< 0.05%
	6-Hydroxyhyoscyamine	≤ 0.2%	< 0.05%
	Scopolamine	≤ 0.2%	< 0.05%
	Norhyoscyamine	≤ 0.3%	< 0.05%
	Apoatropine	≤ 0.2%	< 0.05%
	Littorine	≤ 0.2%	< 0.05%
	Any other individual impurity	≤ 0.1%	< 0.05%
	Total impurities	≤ 0.5%	< 0.05%
	Residual solvents	Chloroform	< 60 ppm
Ethyl ether		< 5000 ppm	750 ppm
Ethanol		< 5000 ppm	580 ppm
Assay	98.5 ~ 100.5%	99.1%	

Packaging & storage	Keep container tightly closed in a dry place
Conclusion	Material complies with USP40