



CERTIFICATE OF ANALYSIS

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1. Identification

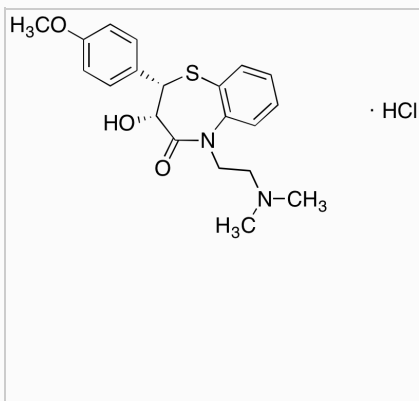
Catalogue Number: D289335

CAS Number: 75472-91-2

Product: Desacetyl Diltiazem Hydrochloride

Synonym: (2S,3S)-5-[2-(Dimethylamino)ethyl]-2,3-dihydro-3-hydroxy-2-(4-methoxyphenyl)-1,5-benzothiazepin-4(5H)-one Monohydrochloride; (2S-cis)-5-[2-(Dimethylamino)ethyl]-2,3-dihydro-3-hydroxy-2-(4-methoxyphenyl)-1,5-benzothiazepin-4(5H)-one Monohydrochloride; Deacetyldiltiazem Hydrochloride

Structure:



Molecular Formula:

$C_{20}H_{24}N_2O_3S \cdot HCl$

Molecular weight:

372.48 + (36.46)

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly), Ethyl Acetate (Slightly), Methanol (Slightly)

Lot Number: 1-KYM-177-7

Purity: 97%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Elemental Analysis	Conforms	%C: 57.09, %H: 6.37, %N: 6.74
HPLC Purity	Report Result	98.45% (210 nm)
MS	Conforms to Structure	Conforms
NMR	Conforms to Structure	Conforms
Appearance	White to Off-White Solid	White to Off-White Solid
Specific Rotation	Report Result	+169.9° (c = 0.1, Chloroform)
Chloride Content	Report Result	8.49% by Ion Chromatography

Additional Information:

N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Henry Tieu	Toni Rantanen	Chanell Chu	5/5/2022	5/3/2026
				