# Active Pharmaceutical Ingredients TAJ PHARMACEUTICALS LIMITED NDIA





#### **Amlodpine Besylate**

Cas No. 111470-99-6.

Chemical Structure:

## Identification

**Synonyms** Amlodipine besilate; 2-[(2-Aminoethoxy)methyl]-4-(2-chlorophenyl)-3-ethoxycarbonyl-5-methoxycarbonyl-6-methyl-1,4-dihydropyridine benzenesulfonate.

 $\textbf{Molecular Formula} \ : \ C_{20}H_{25}CIN_2O_5 \cdot C_6H_6O_3S \ \text{Molecular Weight 567.05 CAS Registry Number 111470-99-6.}$ 

#### **Amlodpine Besylates Description**

Amlodipine besylate is the besylate salt of amlodipine, a long-acting calcium channel blocker.

Amlodipine besylate is chemically described as 3-Ethyl-5-methyl ( $\pm$ )-2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate, monobenzenesulphonate. Its molecular formula is  $C_{20}$   $H_{25}$   $CIN_2$   $O_5 \cdot C_6$   $H_6$   $O_3$  S, and its structural formula is:

Amlodipine besylate is a white crystalline powder with a molecular weight of 567.1. It is slightly soluble in water and sparingly soluble in ethanol. Amlodipine besylate tablets are formulated as white tablets equivalent to 2.5, 5 and 10 mg of amlodipine for oral administration. In addition to the active ingredient, amlodipine besylate, each tablet contains the following inactive ingredients: colloidal silicon dioxide, dibasic calcium phosphate anhydrous, magnesium stearate, microcrystalline cellulose, sodium starch glycolate, and stearic acid.

### **Amlodipine Besylate Precautions.**

#### General

Since the vasodilation induced by amlodipine is gradual in onset, acute hypotension has rarely been reported after oral administration. Nonetheless, caution, as with any other peripheral vasodilator, should be exercised when administering amlodipine, particularly in

patients with severe aortic stenosis.

### **QUALITY CONTROL AND ASSURANCE PRODUCT: AMLODIPINE BESILATE**

MSDS no. TPLM 055614 SPECIFICATION NO. TAJNW-KKWAQ345

**NOMENCLATURE: Amlodipine besylate**;: 3-Ethyl 5-methyl (4RS)-2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-6-methyl-1,4-dihydropyridine-3,5-dicarboxylate benzenesulphonate.

**MOL. WT.:** 567.1

**DESCRIPTION:** White or almost White Powder.

: Slightly soluble in water.

THERAPEUTIC USE: Calcium antagonist.

1. **DESCRIPTION**: White or almost White Powder.

2. **SOLUBILITY**: Freely soluble in Methanol;

Sparingly soluble in Ethanol; Slightly soluble in Water, and in 2-Propanol

**3. IDENTIFICATION: 1.** IR absorption spectophotometry

comparision : Amlodipine Besilate

CRS.

**2.** 0.005% Solution of Test in 1% v/v solution of 0.1%M HCL in Methanol R. Examin between 300 nm to 400 nm. The solution shows an absorption maximum at 360 nm. The specific absorbance at maximum is 113 to 121.

### 4. RELATED SUBSTANCES: A. By TLC

Individual Impurity: NMT 0.1% Total Impurity: NMT 0.3%

B. By HPLC

Impurity D: NMT 0.3% Total of other: NMT 0.3%

Impurities

**5. OPTICAL ROTATION :**  $-0.10^{\circ}$  to  $+0.10^{\circ}$ 

at 589 nm [1% sol. in Methanol]

6. HEAVY METALS: Not more than 20 ppm.

7. LOSS ON DRYING: NMT 0.5%.

(WATER CONTENT)

**8. IRON:** NMT 20 ppm.

9. SULPHATED ASH: NMT 0.2% w/w

## 10. Residual Solvents:

Ethyl Acetate: NMT 5000 ppm
 Methanol: NMT 2000 ppm
 Toluene: NMT 800 ppm

11. ASSAY (By HPLC): Not less than 97.0% w/w and not

more than 102.0% w/w on Anhydrous

**Basis** 

M/S. TAJ PHARMACEUTICALS. LTD.

MUMBAI (INDIA)

FINESHED PRODUCT SPECIFICATIONS

**QUALITY CONTROL AND ASSURANCE PRODUCT: AMLODIPINE BESILATE** 



MSDS no. TPLM 055614

**SPECIFICATION NO. TAJNW-KKWAQ345** 

Assay:99%

Packing: 1kg,5kg, 10kg, 25kg/Drum Usage: pharmaceutical material

Shelf life of API 24 Months

Origin: INDIA

We have experience in Exporting and Manufacturing of all Countries and Overseas medicines in quick reliable manner and we are very interested to start collaboration with your company or organisation!



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