FORMULATION HANDBOOK



4282-050 **Key Words: Amlodipine Besylate, Good**

Flowability, Direct Compression

JRS Products: PROSOLV® EASYtab SP

Amlodipine Direct Compression

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Summary

Amlodipine is a well known calcium channel blocker, prescribed mainly to reduce blood pressure. It is a crystalline API with good flow properties, so PROSOLV® EASYtab SP is used as a binder in direct compression.

Common dosages are 5 and 10 mg Amlodipine or 6.9 and 13.8 mg Amlodipine Besylate respectively.

Formulation

	Active content [mg]	mg/tablet	Contribution [%]
Amlodipine besylate	5.0	6.9	5.75
PROSOLV® EASYtab SP		113.1	94.25
Total		120.0	100.0

Procedure

Blending:

The API was blended with PROSOLV® EASYtab SP for 20 minutes. The powder mixture was ready for direct compression.

Equipment:	
Tablet Press:	Kilian Pressima, 8 mm punch
Turbula Mixer:	Type T2A
Hardness Tester:	Schleuniger Tablet Tester 6D
Dissolution Tester:	Pharmatest PTW 2
Spectrophotometer:	Cecil CE 1021

Tablet Characteristics

Compaction force:	4.5 kN	
Tablet diameter:	8 mm	
Tablet weight:	120 mg	
Tablet weight: Crushing strength:	100 N	
Friability:	0.0 %	
Disintegration time:	25 s	



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Dissolution Test:

Dissolution Medium:

900 mL 0.1 N HCl, 37°C, n=6

Samples were taken after 5, 10, 15, 30 and 60 minutes. The sample volume was 3 mL.

The determination of the active ingredient was done by an UV-spectrophotometer at $\lambda = 360$ nm.

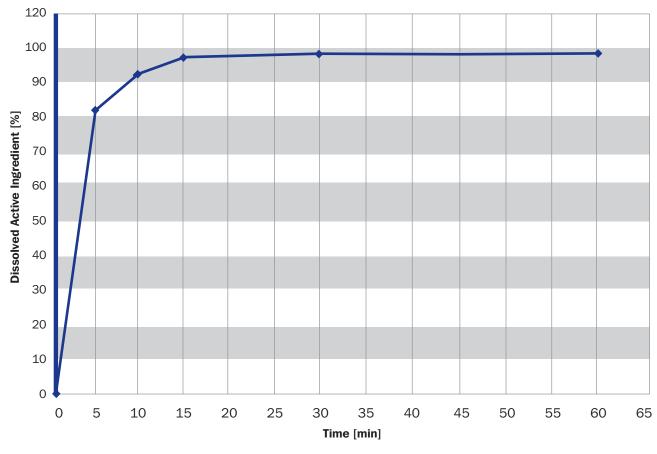


Diagram 1: Typical dissolution profile of an Amlodipine tablet. Produced according to the above formulation.

Disclaimer: The information provided is based on thorough research and is believed to be completely reliable. Application suggestions are given to assist our customers, but are for guidance only. Circumstances in which our material is used vary and are beyond our control. Therefore, we cannot assume any responsibility for risks or liabilities, which may result from the use of this technical advice.



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