



### Ascorbic Acid Tablet, Direct Compression

#### Abstract

**Vitamin C**, also known as **ascorbic acid** and **L-ascorbic acid**, is a vitamin found in food and used as a dietary supplement. The disease scurvy is prevented and treated with vitamin C-containing foods or dietary supplements. Vitamin C is an essential nutrient involved in the repair of tissue and the enzymatic production of certain neurotransmitters. It is required for the functioning of several enzymes and is important for immune system function.

It also functions as an antioxidant. Foods containing vitamin C include citrus fruits, broccoli, Brussels sprouts, raw bell peppers, and strawberries. Prolonged storage or cooking may reduce vitamin C content in foods.

Here, we have made 50 mg **chewable** tablet using HiCel™CE 15 as taste masker, it masked the taste of Ascorbic acid and HiCel™ 90M as a binder, and it gives very good tablet hardness.

#### Ingredient composition

Sr.No.	Name of ingredients	mg/tablet	Contribution (%)
1.	Ascorbic Acid	50.20	30.06
2.	HiCel™MCC 90M	23.025	13.79
3.	HiCel™CE 15	12.03	7.20
4.	Mannitol	80.745	48.35
5.	Purified talc	1.00	0.60
<b>Total</b>		167.00	100

#### Procedure

HiCel™MCC 90M, HiCel™CE 15, coarse grade of Mannitol blend for 10 mins added Ascorbic Acid and mixed 10 - 15 minutes. At last add purified talc for lubrication. The powder mixture was ready for direct compression.

#### Equipment

Sr.No.	Name of equipment	Application	Model/ make
1.	Tablet punching machine	Tablet Manufacturing	10 station, D tooling/ Proton mini press
2.	Weighing Balance	Weighing	ME303/A04/ Mettler Toledo
3.	Tablet Hardness Tester	Hardness Test	TH 1050 M/ Labindia
4.	Tablet Friability Tester	Friability Test	FT1020 / Labindia

#### Tablet Characteristics

Sr.No.	Name of Parameter	Result
1.	Tablet description	Round, flat, white color tablet
2.	Tablet weight	167 mg
3.	Tablet Hardness	41.5 N
4.	Diameter	8.00 mm
5.	Friability	<1%

**Disclaimer:** The information provided in this brochure is based on through research and is believed to be completely reliable. Application suggestions are given to assist our customer, 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 risk liabilities, which may result from the use of this technical, advised