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Vitamin C + Zinc Chewable Tablets Direct Compression

Key Words: Vitamin C, Zinc, Chewable Tablet,
Direct Compression

JRS Products: EMDEX®, PRUV®

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Summary

Zinc (Zn) is an essential trace element for humans. Its deficiency can have marked effects on all components of the immune system. The combination of Zn and Vitamin C is widely used as an immune booster especially in the cold seasons. A

chewable tablet was developed containing a resorbable Zinc salt (Zn-Lactate) and Ascorbic Acid (Vitamin C). The only binder in this formulation is **EMDEX®**; the lubricant is **PRUV®**

Formulation

	Active content [mg]	mg/tablet	Contribution [%]
Zinc Lactate	5.0	18.6*	3.10
Ascorbic Acid	60.0	60.0	10.00
EMDEX® (Dextrates)		498.0	83.00
Aspartame		12.0	2.00
Lemon/Orange Flavor		4.6	0.77
Riboflavin		0.8	0.13
PRUV® (Sodium Stearyl Fumarate)		6.0	1.00
Total		600.0	100.0

*Corresponds to 5 mg of Zn.

Each tablet contains 100 % RDA vitamin C and Zinc.

Procedure

Blending:

All substances, except **PRUV®**, were blended for 18 minutes. **PRUV®** was added and the powder was mixed for another 3 minutes. The powder mixture was ready for direct compression.

Equipment:

Tablet Press	Korsch EK 0
Turbula Mixer:	Type T2A
Hardness Tester	Schleuniger 6D
Disintegration Tester	Pharmatest Standard PTZ
Friability Tester	Pharmatest Standard PTF

Tablet Characteristics

Tablet Weight:	600 mg
Tablet Diameter:	13 mm
Compaction Force:	13 kN
Crushing Strength:	90 N
Friability:	0.5 %

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.