# FORMULATION HANDBOOK



# 4282-058

# Magaldrate **Chewable Tablet Direct Compression**

**Key Words:** Magaldrate, Chewable Tablet, **Direct Compression** JRS Products: EMDEX®, PRUV®

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## **Summary**

Magaldrate is an antacid for the treatment of gastric ulcers and gastroesophageal reflux. It belongs to the group of the sheet silicate antacids which only work in media with a pH value below 5. The chemical structure is  $AI_5Mg_{10}(OH)_{31}(SO_4)_2 x$ H<sub>2</sub>O. Magaldrate is available in chewable tablets or suspension; it is not soluble in water.

The typical dosage of Magaldrate is 800 mg. The following formulation is for a 400 mg chewable tablet. The smaller concentration of API confers improved mouth-feel; patients can simply chew two tablets to achieve an 800 mg dosage.

### **Formulation**

	Active content [mg]	mg/tablet	Contribution [%]
Magaldrate	400.0	400.0	53.3
EMDEX <sup>®</sup> (Dextrates)		225.0	30.0
Xylitol		112.5	15.0
Aspartame		3.0	0.4
Peppermint flavor		2.1	0.3
PRUV <sup>®</sup> (Sodium Stearyl Fumarate)		7.5	1.0
Total		750.0	100.0

#### **Procedure**

#### **Blending:**

All excipients, except PRUV®, were blended for 15 minutes. Afterwards, PRUV® was added to the blend and mixed for an additional 3 minutes. The powder mixture was ready for direct compression.

Equipment:	
Tablet Press:	Kilian Pressima
Turbula Mixer:	Туре Т2А
Hardness Tester:	Schleuniger Tablet Tester 6D

### **Tablet Characteristics**

Compaction Force:	5 kN	
Tablet Diameter:	13 mm	
Tablet Weight:	750 mg	
Crushing Strength:	70 N	

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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