

# 4282-038

**Key Words:** Paracetamol, Effervescent Tablet, Direct Compression

## Paracetamol (Acetaminophen) Effervescent Tablet Direct Compression

**JRS Products:** EMDEX®, PRUV®

Page 1

### Summary

Despite the API's low water solubility, it is possible to prepare an effervescent formulation using **EMDEX®** as a filler and binder. 500 mg is a very common dosage.

### Formulation

	Active content [mg]	mg/tablet	Contribution [%]
Paracetamol (Acetaminophen)	500.0	500.0	12.5
<b>EMDEX®</b> (Dextrate)		2,500.0	62.5
Citric Acid		348.0	8.7
Sodium Hydrogencarbonate		400.0	10.0
Glycine HCl		128.0	3.2
Aspartame		76.0	1.9
Flavor		36.0	0.9
<b>PRUV®</b> (Sodium Stearyl Fumarate)		12.0	0.3
Total		4,000.0	100.0

### Procedure

#### Blending:

All ingredients, except **PRUV®**, were blended for 15 minutes. **PRUV®** was added and the tableting powder was mixed for another 3 minutes. The powder mixture was ready for direct compression.

#### Equipment:

Tablet Press:	Korsch EK 0
Tablet Diameter:	25 mm, biplane,
Hardness Tester:	Schleuniger 2E
Disintegration Tester:	Pharmatest Standard PTZ

### Tablet Characteristics

Compression Force:	23 kN
Crushing Strength:	80 N
Diameter:	25 mm
Disintegration Time:	130 s

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