

4282-005

Key Words: Chromium Picolinate, Sticky Active, Low Dosage, Direct Compression
JRS Products: PROSOLV® SMCC 50, PRUV® PROSOLV® SMCC 90

Chromium Picolinate Direct Compression

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Summary

Chromium Picolinate is compound derived from the mineral chromium and picolinic acid. Chromium is an essential trace element (or micronutrient), required by the body in very small amounts for the hormone insulin to work properly. It also a cofactor in the activity of various enzymes involved in the regulation of blood sugar levels, carbohydrate breakdown and

storage, and the metabolism of fat, protein, and energy (glucose). It is commonly sold as a dietary supplement and used to help control type 2 diabetes. It can be directly compressed using a combination of **PROSOLV® SMCC 50** and **PROSOLV® SMCC 90**.

Formulation

	Active content [mg]	mg/tablet	Contribution [%]
Chromium Picolinate	0.4	0.4	0.27
PROSOLV® SMCC 50 (Silicified Microcrystalline Cellulose)		15.0	9.95
PROSOLV® SMCC 90 (Silicified Microcrystalline Cellulose)		135.0	89.58
PRUV® (Sodium Stearyl Fumarate)		0.3	0.20
Total		150.7	100.0

Procedure

Blending:

Chromium Picolinate, **PROSOLV® SMCC 50** and **PROSOLV® SMCC 90** were added to the V-blender and blended for 10 minutes. **PRUV®** was added to the blender and blended for an additional 3 minutes. The powder mixture was ready for direct compression.

Equipment:

Blender:	Patterson-Kelly 2 qt. twin-shell V-blender
Tablet Press:	Korsch PH-106 rotary tablet press
Hardness Tester:	Erweka TBH-30
Disintegration Tester:	Erweka ZT-62
Friability Tester:	Erweka TA-3

Tablet Characteristics

Tablet Weight:	150 mg
Crushing Strength:	200 N
Compaction Force:	23 kN
Disintegration Time:	160 s

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.