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Functionality of Prosolv Easytab as Direct Compression Excipient

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***SUMMARY*. Specific values of the excipient physical, chemical and technological properties identify its functionality. These concrete values allow the establishment of statistical parameters to use it as excipient. The purpose of the work is the evaluation of Prosolv Easytab as excipient for direct compression. The evaluated parameters included tablet crushing strength y lubricity profiles and particle size of the excipient. The maximal tablet crushing strength D_{max} = 265 ± 12 N defines the surrogate functionality of Easytab as a binder while its explicit functionality to improve metronidazole's compactibility (D_{max}) was 2.25 N per unit percentage Easytab in the formula. The ejection pressure for Easytab tablets was defined as 3.88 ± 0.27 MPa while its particle size was $d_{50\%}$ = 158 ± 21 μm, with a dispersion degree of 0.308 ± 0.025. The calculated parameters allow the reduction of the excipient functionality to numerical values that characterizes the material's functionality and its lot-to-lot variability.**

KEY WORDS: Excipient functionality, Lubricity, Mechanical strength, Particle size.

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