



Free-flowing direct
compression with
superior adsorption
capacity? Why not!

Dry binder granulate with
optimized flowing properties,
superior adsorptive capacity
for moisture protection, an
easy to use tableting agent.

Product Information

CompactCel® SIL

BIOGRUND's one-step tableting agent **CompactCel® SIL** provides an easy to use, granulated and homogeneous compound of Silica and PVP/NaCMC or HPC/NaCMC, which acts as a perfect dry binder granulate.

With **CompactCel® SIL** it is possible to produce direct compressed tablets containing excipients and a high content of active ingredients (which are normally incompressible) in one step. A wet granulation step to isolate the active ingredients with an excipient is in most cases not needed. Further-more liquid ingredients can be converted into powders.

The use of Silica within the compound improves free flowing properties, gives better compaction and

a superior adsorptive capacity for increased stability (by adsorbing surrounding liquids or moisture) and an improved dissolution profile.

CompactCel® SIL increases the hardness and improves the friability of the tablet at lower compression forces. **BIOGRUND** recommends using 2–5% within the core formulation to achieve best results. The product can be used for pharmaceutical and nutritional applications.

Regulatory and quality aspects: All **CompactCel® SIL** formulations are developed to meet the official regulatory requirements of the user's country for pharmaceutical products and for nutritional or dietary supplements.

General Information on BIOGRUND

Since 1999, **BIOGRUND** has been the specialist for the homogeneous mixing of excipients and carriers. With locations in Germany, Switzerland, America and Russia, we support the food supplement and pharmaceutical industry in the development, formulation and production of solid oral dosage forms. The tailor-made and ready-to-use special powder mixtures for film coating, sugar-coating, coloring and tableting enable optimum results in a short time. Easy, fast and reliable!

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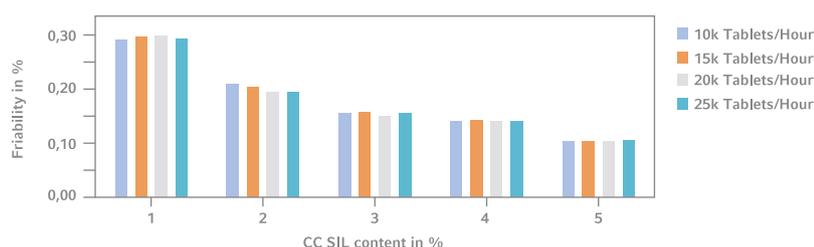
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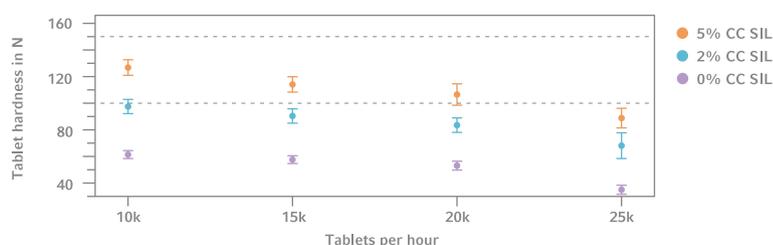
Fig. 1: Tablet Friability Comparison (n=10)



Direct compressed formulation: 50% Glucosamine-Sulfate 2KCl, MCC (42.5–47.5%), 2% NaCMC-CL, CompactCel® SIL (HPC/NaCMC/Silica, 0.0–5.0%) and 0.5% Mg-St.

Using already 1% of the dry binding agent in the tablet mass causes friability values lower than 0.3%.

Fig. 2: Tablet Hardness Comparison (n=10)



Direct compressed formulation: 50% Glucosamine-Sulfate 2KCl, MCC (42.5–47.5%), 2% NaCMC-CL, CompactCel® SIL (HPC/NaCMC/Silica, 0.0–5.0%) and 0.5% Mg-St.

Optimal values (between 100–150 N) are shown within the dashed area.

GRACE