

# CAB-O-SIL® M-5DP Fumed Silica

## Higher bulk density fumed silica for tableting

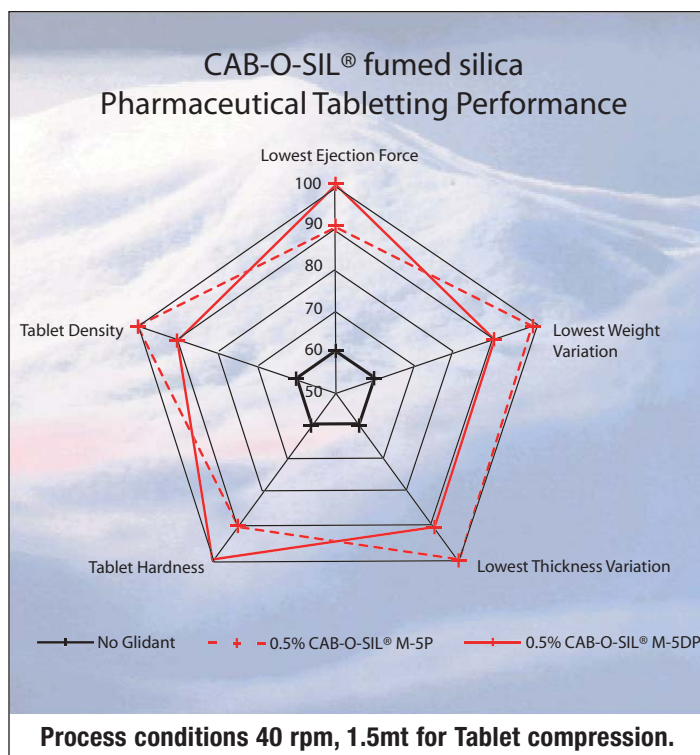
**CAB-O-SIL** fumed silica is widely used as a glidant and tableting aid in the pharmaceutical and nutraceutical industries. To enhance Cabot's excipient product line, we are introducing **CAB-O-SIL M-5DP** fumed silica.

This product, a higher bulk density fumed silica, offers lower freight and storage costs and easier handling while retaining all the performance advantages of **CAB-O-SIL M-5P**.

CAB-O-SIL M-5DP and CAB-O-SIL M-5P meet the requirements of USP 25 /NF 20 and EP 01/2002:0434 monographs.

### The addition of 0.5% CAB-O-SIL M-5DP or M-5P fumed silica yields:

- **Greater tablet hardness and density** - reducing tablet chipping and breakage during handling, coating, packaging and shipping.
- **Greater uniformity in both tablet weight and size** - reduced tablet weight and thickness variability
- **Improved tableting operations** - high quality tablets at lower ejection force and faster press speeds

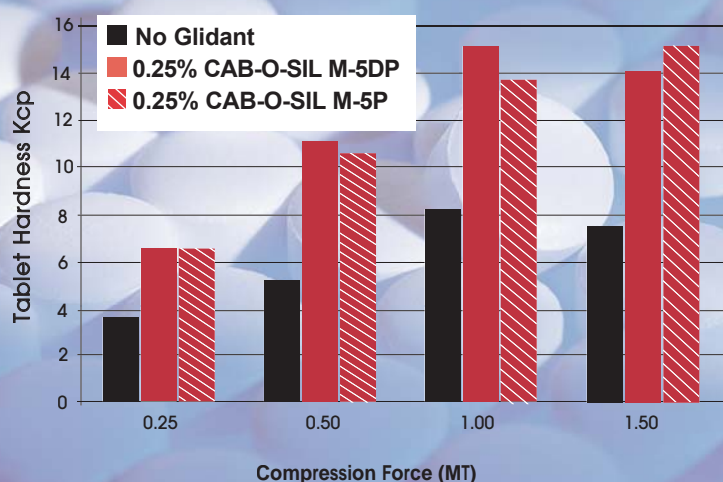


#### Important Star Diagram Note:

This data represents a comparison of performance properties and not the actual performance values. Values farthest from the center of the star diagram represent optimum performance.

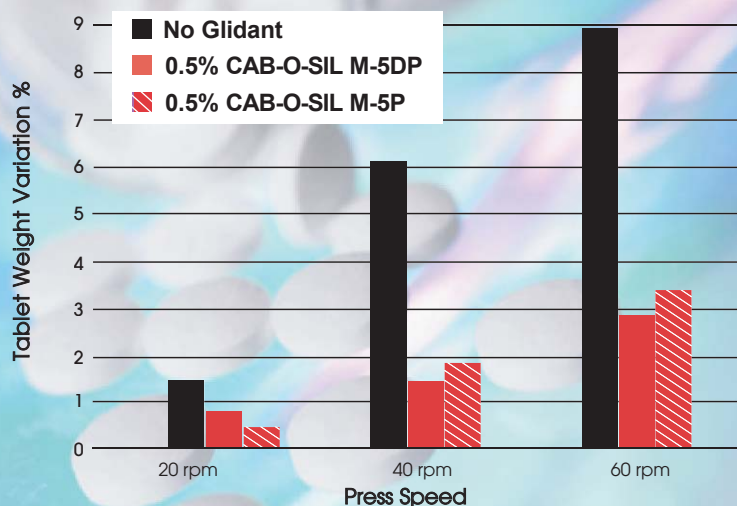
## CAB-O-SIL® M-5DP PERFORMANCE RESULTS

### Harder Tablets at Lower Compression Forces



- The addition of as small an amount as 0.25% of **CAB-O-SIL M-5DP** or **M-5P** shows a significant improvement in tablet hardness
- Relative to tablets formulated without a glidant, **CAB-O-SIL M-5DP** or **M-5P** doubles the tablet hardness and increases productivity.
- Reduced compression force is an indicator of wear reduction on the presses and dies.
- Best tablet hardness is obtained at 1 metric ton of compression

### Reduced Variation at Higher Press Speeds



- The addition of 0.5% of **CAB-O-SIL M-5DP** or **M-5P** allows tablet manufacturer to produce high quality tablets at higher tablet press, hence improving productivity.
- At 60 rpm, **CAB-O-SIL M-5DP** reduces tablet weight variation below 3%.

TD-161 "**CAB-O-SIL Fumed Silicas The Performance Additives**" available upon request.

For any additional information and base formulation, please contact a technical service representative in your region or visit our website: [www.cabot-corp.com/cabosil](http://www.cabot-corp.com/cabosil)

### Gains with CAB-O-SIL M-5DP and M-5P Fumed Silica

- + Increased Tablet Hardness
- + Increased Tablet Tensile Strength
- + Increased Tablet Weight Uniformity
- + Increased Tablet Content Uniformity
- + Enhanced Dissolution
- Reduced warehouse and freight charges
- Reduced Equipment Compression forces
- + Increased Equipment Processing Speed

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