

ProBlend[®]
Silicified Microcrystalline Cellulose

ABOUT US

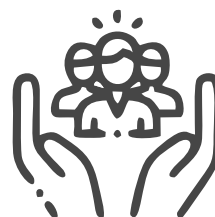
Gangwal Healthcare is a efficacious solution provider and manufacturer that combines innovative research and smart, seamless technology that can tackle the complex challenges of the healthcare system through novel formulations that enhance the quality of life.

Today, as we see newer health challenges cropping up day after day, at Gangwal Healthcare we strive to resolve these by plugging in our rich knowledge and working alongside industry experts who have a strong foothold in pharmaceuticals and nutraceuticals. To give the optimum solution and produce products of the highest quality begins with understanding your needs and concerns and extracting those insights. Promptly followed by bringing in the raw materials that promise the best outcome and blending them with our latest technologies and processes to manufacture a product that can simplify your complications.



Mission

To become a global healthcare company through Innovation, Quality and Competence.



Vision

To build healthier society - Driven by innovation to serve with quality.

Certificates



Quality

We keep quality as the highest priority when it comes to the products manufactured at Gangwal along with processes deployed or technologies adapted. We firmly believe that nothing can supersede a product or a service that is backed by excellent quality. As solution providers, we strive to have a global footprint through each phase of our journey.

Innovation

Modern medicine is seeing the traces of ancient sciences blend with it effectively, thanks to technology and innovation. Our highly dedicated task forces keep innovation at the center of their activities so that the world can truly reap the optimum benefits of what we create or source. Innovations aid us to challenge the most complex health concerns, thereby addressing your prominent issues.

Consistency

Nothing can make an impact in its entirety unless it comes with consistency. Be it our top management or other teams within the organization, we thrive on consistency at work, in order to see the bigger reforms in health that we are aiming for. Whether it's our external or internal stakeholders we are strongly driven by persistent efforts towards improving the quality of lives that people lead.

Introduction

Pharmaceutical dosage forms with the advancement of manufacturing process, the demand for excipients with superior functionality like flowability, compressibility has increased. Direct compression is the most preferred, easiest & fastest process for manufacturing of tablets at relatively low cost.

Gangwal Healthcare have developed Silicified Microcrystalline Cellulose USP-NF under the brand name ProBlend. During direct compression, typically formulators face the challenge of poor powder flow property & poor compressibility, Sticking of tablets, sensitivity towards lubricants, insufficient hardness & higher friability. Solid oral dosage form is the most acceptable form of drug administration. Tablets and capsules accounts for more than 80% of all the dosage forms.

Silicification process produces a material which is chemically and physically very similar to standard MCC & Colloidal Silicon Dioxide. This process improves the flow properties compared to conventional MCC by reducing the cohesiveness of the powder particles. Better flowability leads to manufacturing of tablet at faster compression speed, which leads to enhanced productivity. Co-Processing of MCC and CSD using Problend technology resulting into unification of two excipients (MCC & CSD) with uniform distribution of CSD on the MCC particle surface. This unification of MCC & CSD is done at particle level which is known as Particle Engineering. This process improves the powder characteristics like flow & compressibility for direct compression along with reduced sensitivity of powder towards strain and lubrication.

Benefits of SMCC

1. Better flow
2. Superior compressibility, resulting in better hardness
3. Faster manufacturing using direct compression, resulting in faster production
4. Chemically inert
5. Better lubrication efficiency
6. Better blend uniformity & content uniformity
7. Avoid tedious Handling of CSD during manufacturing
8. Prevents sticking
9. Better hardness
10. Clean handling, no dust generation.
11. Easy formulation of MUPs formulation.

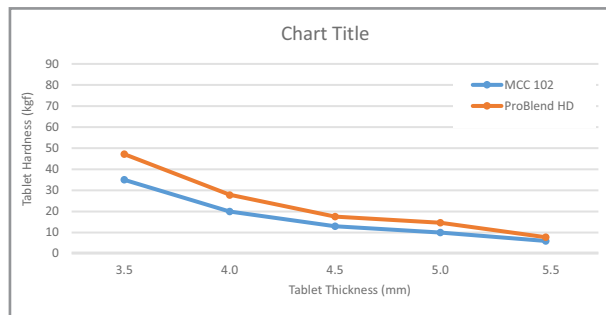
A variety of SMCC grades available to overcome different challenges in formulations.

ProBlend LD	Suitable for formulation requires a balance in compression & flow at a less tablet weight
ProBlend HD	Suitable for formulations which require optimum flow and less disintegration time.
ProBlend	Suitable for Highest tablet weight & MUPs formulations.

Case Study

Compressibility Assessment of MCC & ProBlend HD

Silicification of MCC with CSD by ProBlend technology give 25-35% better hardness and compressibility during direct compression as compared to MCC alone. Compression trials are conducted with MCC alone and ProBlend HD at tablet weight of 500mg using 12mm flat punch in round shape at 5 different tablet thickness like 3.5mm, 4.0mm, 4.5mm, 5.0mm, 5.5mm and tablet hardness in evaluated data of the trial are shown below in table.



ch in round shape at 3 different tablet thickness like 3.5mm, 4.5mm, 5.5mm and checked for tablet hardness.

Regulatory information

Problend, SMCC is a unified composite powder form obtained by process engineering of Microcrystalline Cellulose IP/ USP-NF/ pH.Eur and Colloidal Silicon Dioxide IP/USP-NF/pH.Eur. It is a USP-NF 27 monographed co-processed material. USDMF Type IV Number is 033081

Storage

Preserve in well closed containers, away from direct sunlight and heat. Store at ambient temperature.

Packaging

Available in Corrugated box and HDEP drums.

Sample Sizes

500g to 2kg

Shelf Life

5 Years (Stability on-going till 5 years)

