

**CelluTech<sup>®</sup>**

Pharma Private Limited



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## **ABOUT US**

CelluTech is one of the leading Microcrystalline Cellulose manufacturers in India. We work with a team of highly qualified and technical experts serving in the production of pharmaceutical excipients, MCC, and Silicified MCC.

Cellutech, as one of the most reliable microcrystalline cellulose suppliers, works hard to ensure the reliability of its supply chain for customers around the globe.

CelluTech uses the highest quality raw material from approved suppliers and provides the most favourable production and working environment to maintain the international standards for microcrystalline cellulose manufacturers.

Our experienced technical group maintain the company's vision to efficiently satisfy growing customer demands and guarantee that Cellutech becomes a global leader in the future.

As the most sought after microcrystalline cellulose powder manufacturer in India, we strive to fulfill our client's requirements across all segments of the Pharmaceutical industry.

Our innovative excipients, including the microcrystalline cellulose powder, provide complete solutions for the development and production of solid and liquid dosage forms. As microcrystalline cellulose powder manufacturers, we work to offer a valuable additive in pharmaceutical, food, cosmetic, and other industries.





## Response

Committed to providing the best services to our customers driven by quick turnaround time and high customer orientation

## Innovation

Constant endeavor to ingrain an innovative culture throughout our organization

## Team Orientation

Open and lateral channels of communication within teams to encourage the exchange of new ideas and information

## Entrepreneurial

Our entrepreneurial spirit drives our thinking, execution and the responsibility to bring your ideas to fruition

## Speed

We are focused on rapid responses with concrete deadlines. We have inculcated a culture of flexibility, dynamism and speed to provide agility to our organization.

## Quality Assurance

Quality with consistency is one core strength that keeps CelluTech Pharma competitive in the excipient Industry.



**98%**  
Perfect Order Rate



**85%**  
Customer Lifetime Value



**24Hrs**  
Average Resolution Time



**01**

Pioneers in Manufacturing Microcrystalline Cellulose (MCC) and Silicified Microcrystalline cellulose.

**02**

We provide 100% spray-dried MCC for Direct Compaction on high-speed tableting machines.

**03**

State-of-the-art facilities ensure minimal Technical Unavoidable Particles as per TUPP Guidelines by IPAC.

**04**

High Capacity GMP spray dryers and mixers for large batch sizes and minimum batch variations with strong data controls.

**05**

Our expertise is customizing our products as per customer requirements for Particle Size and Bulk Density.

**06**

A dedicated facility with state of the art equipment that is certified by ISO, GMP, GLP and US DMF.

**07**

We utilise high-quality, highly purified pulp for manufacturing of excipients.

**08**

A dedicated technical and laboratory team has differentiated us from other MCC manufacturers around the globe.

**09**

We have dedicated Quality Control and Quality Assurance teams to ensure our facility runs with strict GMP, GLP standards.

**10**

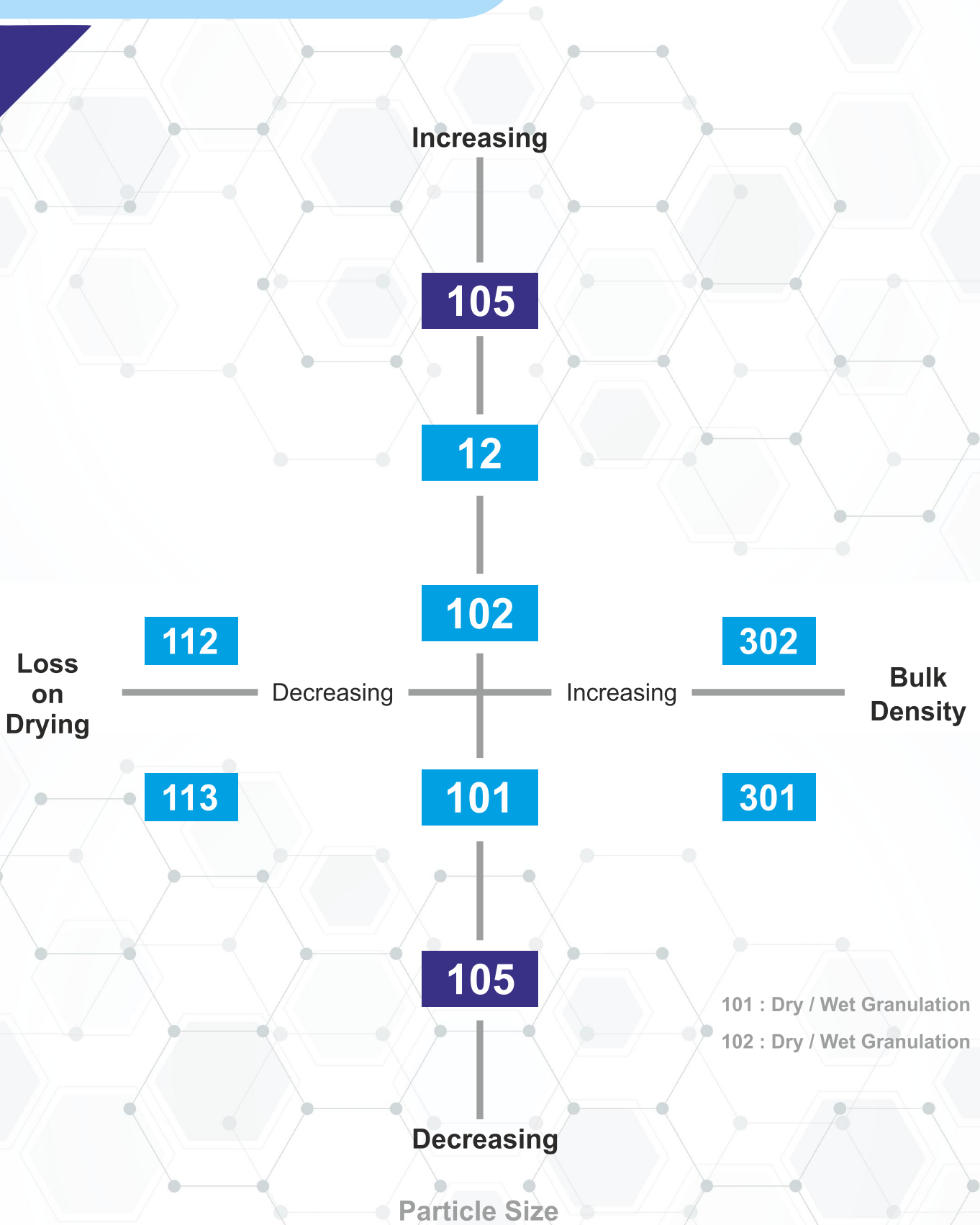
Optimal quality with a competitive price for all our excipients.

**11**

A double filtration process to ensure optimal quality along with a double sieving process to ensure consistency in each bag.



## AVAILABLE TYPES





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## PRODUCT DETAILS

### RITECEL<sup>®</sup> MCC

|                          |                          |
|--------------------------|--------------------------|
| RITECEL <sup>®</sup> 101 | RITECEL <sup>®</sup> 302 |
| RITECEL <sup>®</sup> 102 | RITECEL <sup>®</sup> 301 |
| RITECEL <sup>®</sup> 112 | RITECEL <sup>®</sup> 103 |
| RITECEL <sup>®</sup> 12  | RITECEL <sup>®</sup> 200 |

(Standard Types)

### RITECEL<sup>®</sup> SMCC

SMCC 50

SMCC 90

SMCC 90 LM

SMCC 90 HD

### RITECEL<sup>®</sup> CMC

CMC RC 591

CMC RC 581

CMC RC 611

### RITECEL<sup>®</sup> CP

CELLULOSE  
POWDER (E 460 i)

CELLULOSE  
POWDER (E 460 ii)



**RITECEL<sup>®</sup> MCC**

**Microcrystalline Cellulose**

RITECEL MCC is a multi-functional excipient widely used in solid dosage for the pharmaceutical industry as a binder/filler/diluent/disintegrate in direct compression, dry granulation, or wet granulation process.

| GRADE | PARTICLE SIZE DISTRIBUTION         |              |                              |           |          | LOD**<br>% | BULD<br>DENSITY**<br>g/ml |
|-------|------------------------------------|--------------|------------------------------|-----------|----------|------------|---------------------------|
|       | Retention Method (Sieve Analysis)* |              | By Laser Diffraction Method* |           |          |            |                           |
|       | 60# %                              | 200# %       | D10 (µm)                     | D50 (µm)  | D90 (µm) |            |                           |
| 101   | NMT 1.0                            | NMT 30       | NMT 30                       | 40 - 60   | NLT 80   | 3.0 - 5.0  | 0.27 - 0.34               |
| 102   | NMT 8.0                            | NLT 45       | NMT 45                       | 70 - 100  | NLT 140  | 3.0 - 5.0  | 0.26 - 0.34               |
| 112   | NMT 8.0                            | NLT 45       | NMT 45                       | 70 - 100  | NLT 140  | 0.0 - 1.5  | 0.26 - 0.34               |
| 12    | 40 # NMT 1                         | 325 # NLT 70 | NMT 50                       | 100 - 140 | NLT 200  | 3.0 - 5.0  | 0.26 - 0.40               |
| 302   | NMT 8.0                            | NLT 45       |                              |           |          |            | 0.28 - 0.45               |
| 301   | NMT 1.0                            | NMT 30       | NMT 30                       | 40 - 60   | NLT 80   | 3.0 - 5.0  | 0.34 - 0.45               |
| 103   | NMT 1.0                            | NMT 30       | NMT 30                       | 40 - 60   | NLT 80   | 1.0 - 3.0  | 0.26 - 0.34               |
| 105   |                                    | 400 # NMT 1  |                              |           |          | 1.0 - 5.0  | 0.20 - 0.30               |
| 112   | 40 # NMT 1                         | 100 # NLT 50 | NMT 70                       | 150 - 200 | NLT 260  | 3.0 - 5.0  | 0.31 - 0.39               |

NMT : Not More Than    NLT : Not More Than    \*: Customize as per customer requirements.    \*: More restrictive than a compendium.

(Standard Types)



## RITECEL<sup>®</sup> MCC

| TYPE                           | MAIN APPLICATION  |
|--------------------------------|---|
| <b>RITECEL<sup>®</sup> 101</b> | Fine standard MCC grade, especially suited for wet granulation, roller compaction, and spheronization. Very high compact ability.<br>Direct compression tableting.<br>Wet granulation.  |
| <b>RITECEL<sup>®</sup> 102</b> | Medium size standard MCC grade, suited for the majority of directly compressible actives. Combines good flow and high compact ability.<br>Direct compression tableting.<br>Wet granulation.<br>Larger particles improve the flow and production rate.   |
| <b>RITECEL<sup>®</sup> 103</b> | Same quality as grade 101, but has a very low moisture content (<1.5%) for processing water-sensitive actives.<br>For moisture-sensitive materials.   |
| <b>RITECEL<sup>®</sup> 112</b> | Same quality as grade 102, but has a very low moisture content (<1.5%) for processing water-sensitive actives.<br>For moisture-sensitive materials.<br>Direct compression tableting.<br>Wet granulation.  |
| <b>RITECEL<sup>®</sup> 12</b>  | Coarse grade MCC combines good compact ability but high binding capacity with outstanding flow. Provides good content uniformity at low weight variation- even when used with low concentrations of fine actives.<br>Outstanding flow ability.<br>Excellent Uniformity.<br>Short mixing time. |



## RITECEL<sup>®</sup> MCC

| TYPE                           | MAIN APPLICATION  |
|--------------------------------|---|
| <b>RITECEL 302</b>             | <p>Same quality as grade 302, but increased bulk density and improved flow properties. Especially suited for high-speed tableting and processing high-density actives.<br/>Grater tablet weight, uniformity.<br/>Direct compression tableting.<br/>Wet granulation.<br/>Potential for making smaller tablets.</p> |
| <b>RITECEL<sup>®</sup> 301</b> | <p>Same quality as grade 101, but increased bulk density and improved flow properties.<br/>Direct compression tableting.<br/>Wet granulation.<br/>Potential for making smaller tablets.</p>   |
| <b>RITECEL<sup>®</sup> 200</b> | <p>Large size MCC grade with excellent flow properties for a variety of direct compression formulations.<br/>Direct compression tableting.<br/>Wet granulation.<br/>Potential to reduce tablet weight variation and improves content uniformity.</p>  |
| <b>RITECEL<sup>®</sup> 105</b> | <p>Very fine grade, which gives a pleasant mouth feeling, masks bitter tastes, and supports flavors.<br/>Direct compression of coarser, granular &amp; crystalline Material.</p>  |



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## Benefits of **RITECEL**<sup>®</sup> MCC

High Dilution  
Potential



Strong  
Dry Binder



Hardness at low  
compression  
pressure



Excellent  
compressibility that  
allows for high tablet



Facilities low  
tablet friability



Promotes tablet  
disintegration through  
fast water uptake.



Wet granulation,  
promotes rapid  
even wetting and  
uniform rapid drying



Has inherent  
lubrication,  
anti-adherent and  
absorbent properties



Superior physical and  
chemical stability





**RITECEL<sup>®</sup> SMCC**

**Silicified Microcrystalline Cellulose (SMCC)**

RITECEL SMCC is increased physical properties such as true density, Hauser ratio, porosity, ejection force, and specific surface area.

Other properties such as bulk and tap densities were reduced due to the amorphous and light character of fumed silica.

| GRADE                 | PARTICLE SIZE DISTRIBUTION         |        |                              |          |           | LOD**<br>% | BULD<br>DENSITY**<br>g/ml |
|-----------------------|------------------------------------|--------|------------------------------|----------|-----------|------------|---------------------------|
|                       | Retention Method (Sieve Analysis)* |        | By Laser Diffraction Method* |          |           |            |                           |
|                       | 60# %                              | 200# % | D10 (µm)                     | D50 (µm) | D90 (µm)  |            |                           |
| <b>SMCC 50</b>        | NMT 1.0                            | NMT 30 | 15 - 30                      | 45 - 80  | 100 - 180 | 3.0 - 5.0  | 0.27 - 0.35               |
| <b>SMCC 90</b>        | NMT 8.0                            | NMT 45 | 20 - 50                      | 90 - 150 | 190 - 300 | 3.0 - 5.0  | 0.25 - 0.38               |
| <b>SMCC<br/>90 HD</b> | NMT 8.0                            | NMT 45 | 20 - 70                      | 90 - 160 | 160 - 320 | 3.0 - 5.0  | 0.35 - 0.50               |

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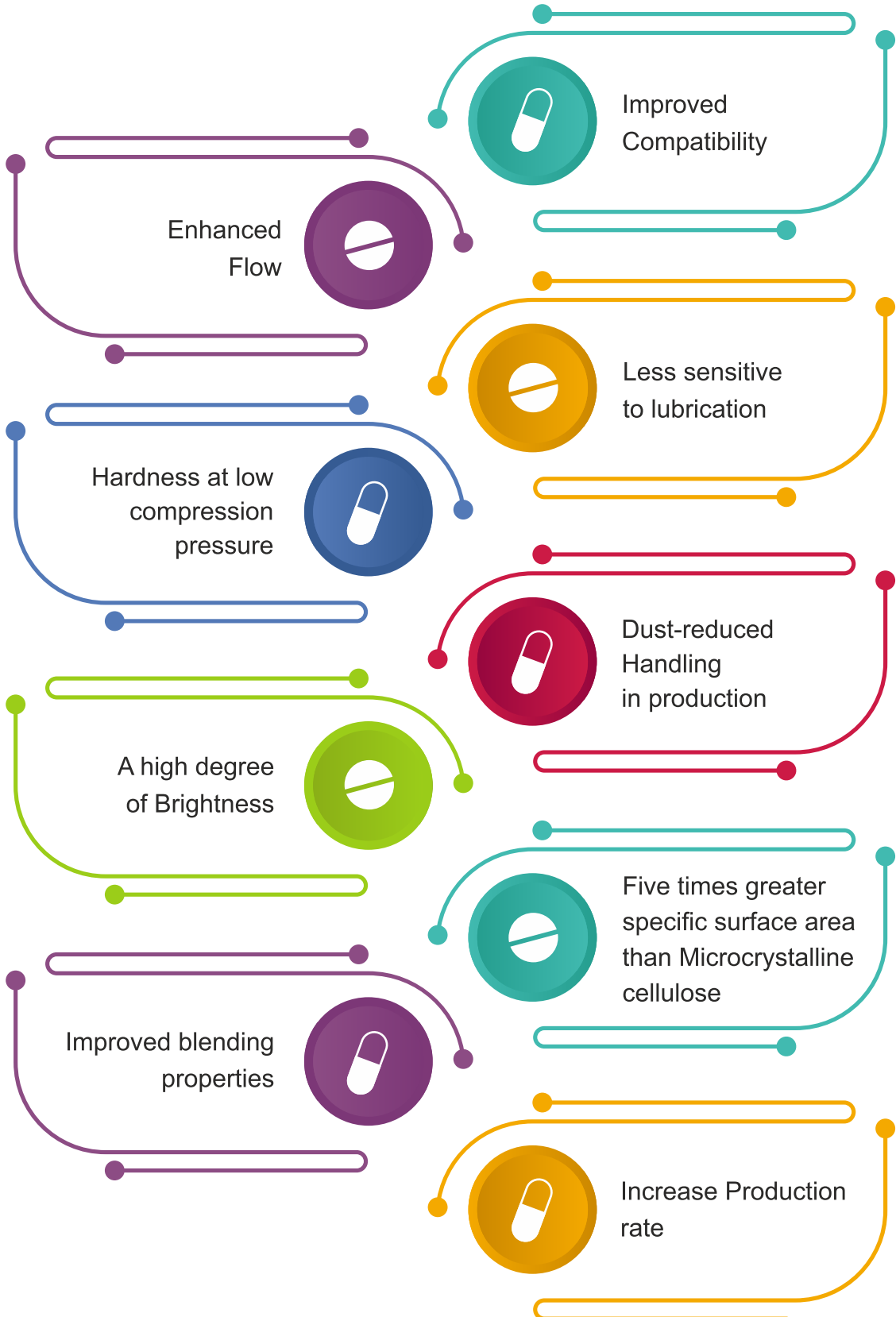
## RITECEL<sup>®</sup> SMCC

| TYPE                            | MAIN APPLICATION   |
|---------------------------------|--|
| RITECEL <sup>®</sup> SMCC 50    | <p>Fine standard SMCC grade, recommended in Formulas that require optimal flow and consolidation exhibits the best disintegration time, indicating their superior ability to break down into smaller particles and dissolve evenly. And the best binder in our segment.</p> <p>Direct compression tableting.</p>           |
| RITECEL <sup>®</sup> SMCC 90    | <p>Suitable in formulation for a balance of flow and compaction is required. recommended for Higher production speeds, and Rapid formulation development.</p> <p>Direct compression tableting.</p> <p>Larger particles improve the flow and production rate.</p>   |
| RITECEL <sup>®</sup> SMCC 90 HD | <p>Same quality as grade SMCC 90, but increased bulk density and improved flow properties. Especially suited for high-speed tableting and processing high-density actives. Grater tablet weight, uniformity.</p> <p>Direct compression tableting.</p> <p>Wet granulation.</p> <p>Potential for making smaller tablets.</p> |



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## Benefits of **RITECEL<sup>®</sup> SMCC**





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## Benefits of **RITECEL<sup>®</sup> SMCC**





## RITECEL<sup>®</sup> CMC

### MCC with Carboxymethyl Cellulose Sodium

RITECEL CMC RC grade is increased properties such as Suspension absence of sedimentation, Emulsifier, Emulsion Stabilizer, and thickener with opacifier in lotions and creams.

| GRADE         | VISCOSITY,<br>CPS                     | Assay, %<br>(NLT 75% and NMT 125%<br>of the labelled amount of<br>Carboxymethyl<br>Cellulose Sodium,<br>Calculated on a<br>dried basis) | PARTICLE SIZE DISTRIBUTION |        |        | LOD**<br>% |
|---------------|---------------------------------------|---|----------------------------|--------|--------|------------|
|               |                                       |   | 60# %                      | 200# % | 325# % |            |
| CMC RC<br>581 | Between<br>70 and 170<br>(2.1% Solid) | 8.3 - 13.8  | NMT 0.1                    | NMT 35 |        | NMT 8.0    |
| CMC RC<br>591 | Between<br>40 and 95<br>(1.2% Solid)  | 8.3 - 13.8  | NMT 0.1                    |        | NMT 45 | NMT 8.0    |
| CMC RC<br>611 | Between<br>50 and 120<br>(2.6% Solid) | 11.3 - 18.8   | NMT 0.1                    |        | NMT 50 | NMT 8.0    |

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## **RITECEL<sup>®</sup> CMC RC**

Is a mixture of microcrystalline cellulose and carboxymethyl cellulose sodium with various ratios as per grades as well as ratios depending on the end application.

| <b>TYPE</b>       | <b>MAIN APPLICATION</b>   |
|-------------------|---|
| <b>CMC RC 581</b> | Primarily used in syrups, and suspensions such as antacid preparations, Nozzle Sprays, Drenches, Gels, and Emulsions. |
| <b>CMC RC 591</b> | Primarily used in syrups, and suspensions such as antacid preparations, Nozzle Sprays, Drenches, Gels, and Emulsions. |
| <b>CMC RC 611</b> | In food such as dairy products, beverages, bakery products, sauces, dressing, and processed meat.                     |



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## Benefits of **CELLUTECH<sup>®</sup>** Powder Cellulose

Approved by General Standard for  
Food Additives (GSFA), WHO

It is advantageous to the  
manufacturer to enhance  
the functional  
properties of food



Crispiness &  
Non-Browning  
properties give golden



To reduce loss  
of moisture  
Microcrystalline  
cellulose



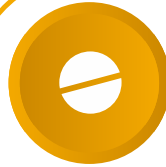
Improve microwave  
properties



Dietary Insoluble Fibre,  
Inert Material,  
Highly Pure - 99% & White,  
Natural Fibre, Tasteless



Reduced fat  
pick-up / Providing  
non-calorie solid



Yellow colour to  
all Indian fried foods



Inertness



Bulking agent

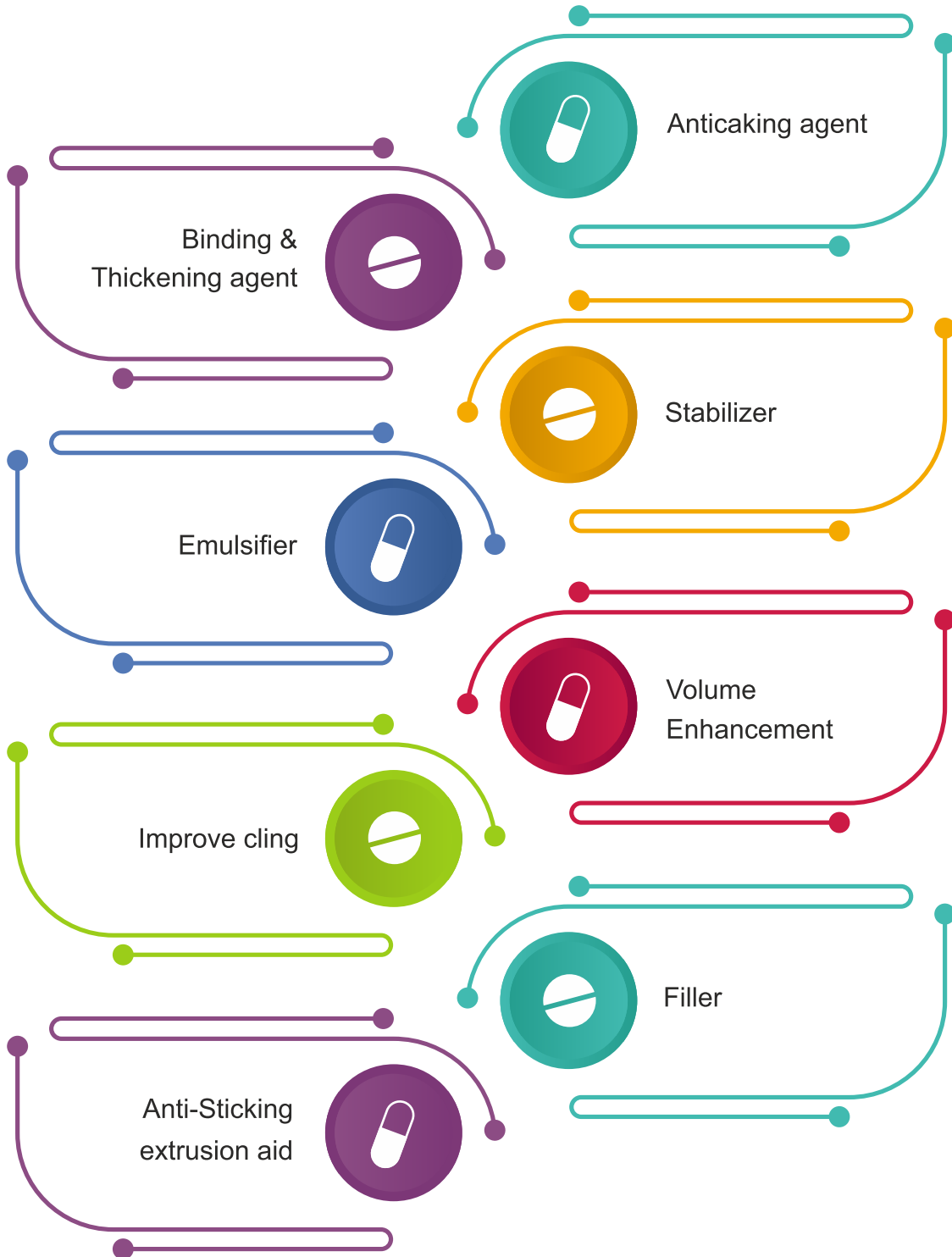




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## Benefits of **CELLUTECH<sup>®</sup>** Powder Cellulose

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Food Additives (GSFA), WHO






*Get in touch*

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