



CALSPAR INDIA



(An ISO 9001-2015 and FSSAI Certified Company)

License No:22617029000271

Manufacturers of Various Grades of Calcium Carbonate

Head Office: 21/57, E.C. Road, Dehra Dun – 248001 (Uttarakhand).

Website: www.calsparindia.com, Email info@calsparindia.com, Mobile: 9927122466

CALSPAR's - CALPure (A FSSAI Certified Food Grade Calcium Carbonate)

A CRISP SENSATION TO BOOST CALCIUM



CALSPAR is into manufacturing of Calcium Carbonate Powder which is FSSAI Approved and IP/USP/BP/EU Compliant. Food Safety Standards Maintained by CALSPAR meet the global requirements of HACCP (Codex Alimentarius) and FSSC: 22000 (Food Safety Standard Certification). The manufacturing operations at Calspar are in compliance with GMP Standards stipulated by Codex Alimentarius Commission of WHO. We are supplying this to a number of big food products, pharmaceutical and nutraceutical product manufacturers.

This product has high Calcium Carbonate and is virtually free from Silica, Lead, Arsenic and other heavy metal impurities. The raw material for this product is best available deposit in this part of the world and with our expertise we refine it further to make it most suitable for specialized chemical applications, Nutraceutical, Pharmaceutical applications, for Manufacturing Toothpaste, Snacks, Bakery items, ice creams, wineries and breweries and as food additive in various other edible products.

Pure enjoyment is no longer the only need that consumers have when it comes to snacking. The role of snack products is expanding and snacks are increasingly serving as a meal replacement. Simple ready-made food

Solutions that offer indulgence are flying off the shelves in supermarkets.

The landscape for manufacturers is competitive. To be successful, they will have to satisfy evolving consumer demands, for better taste, texture and health impact.

Calspar's CALPure is a high purity Calcium Carbonate that can help formulators to achieve their goals in multiple ways. Naturally derived and available in a variety of mastered particle sizes, it not only improves nutritional profile as a calcium source, but also the process ability and texture of a vast range of savory snacks including breakfast cereals.

PRODUCTS:

CALPure, CALPure 300 (L)

Excellent Source of Calcium

With 40% of available elemental calcium, it only takes 1/4 gram of Calspar's Calcium Carbonate to provide elemental calcium: that equates to 10% of adult's daily requirement. Accordingly, up to five times less **CALPure**-Calcium Carbonate is required to meet the same calcium content 100 mg to support any possible nutritional claim other available solutions on the market.

CALSPAR's Calcium Carbonate food grade ingredients meet both E170 and FCC standards



Benefits

- FSSAI Approved Food Grade
- Excellent source of calcium
- Natural nucleating agent & extrusion aid
- Improves crispness
- Increases exudate's Expansion.

Calspar's Calcium Carbonate is A Bio available source having The highest elemental calcium content

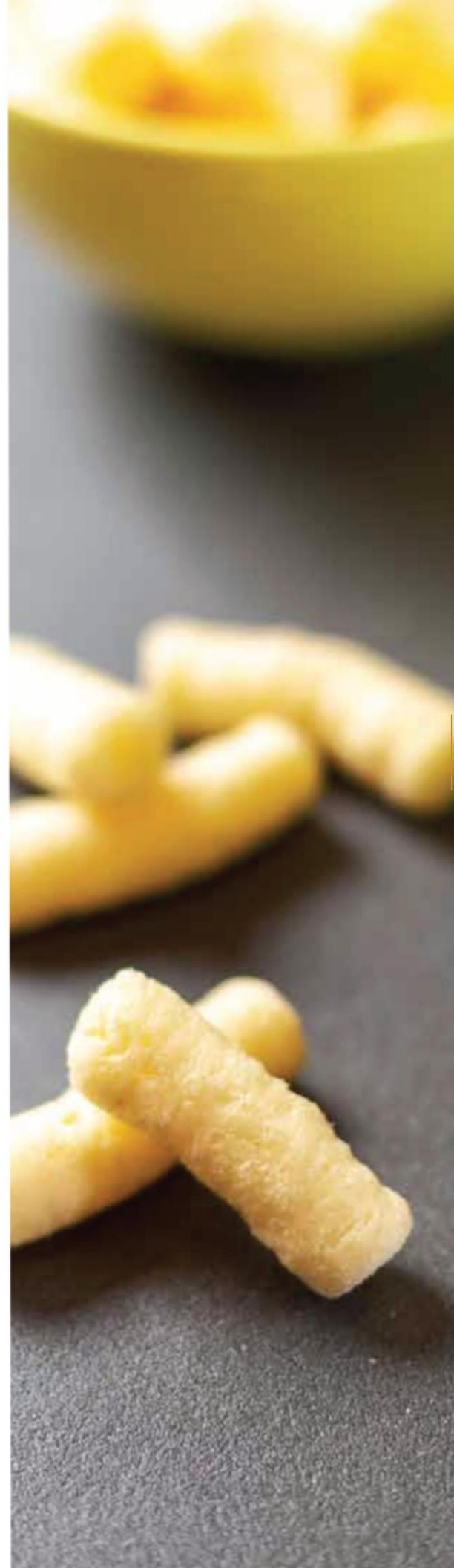
Calcium Carbonate As a Nucleating Agent

Calspar has developed tailor-made particles for use in extruded food products. Whether in snacks or extruded cereals, **CALPure** acts as a nucleating agent. Providing multiple well-distributed surfaces in which gas bubbles can form during the release of water vapor. The amount and size of **CALPure** can be tailored to offer the optimum quantity and homogenous distribution of fine gas bubbles, improving expansion and texture.

Calspar has a profound understanding of how **CALPure** can aid in the extrusion process of foods. Significant improvements in crispness and texture can be obtained with just 0.5 to 1.5% of added **CALPure**. Furthermore, even these low concentrations already allow for a calcium claim to be made on the final product.

Benefits

- *Very fine granulometry*
- *Improves texture & crispness*
- *Increases hardness & Expansion index*
- *Ensures a homogenous bubble distribution*
- *Enhances taste perception (saltiness/ sweetness)*





Cereals

The organoleptic properties of cereals containing Calspar's **CALPure** are described as crispy, light and fluffy. A concentration of 1.5% **CALPure** is suggested for the improved crispness of extruded wheat-based breakfast cereals. The crispness of extruded cereals can be improved by up to 45%. Moreover, an enhanced perception of sweetness has also been detected.

Cereal crispness in wheat-based cereals

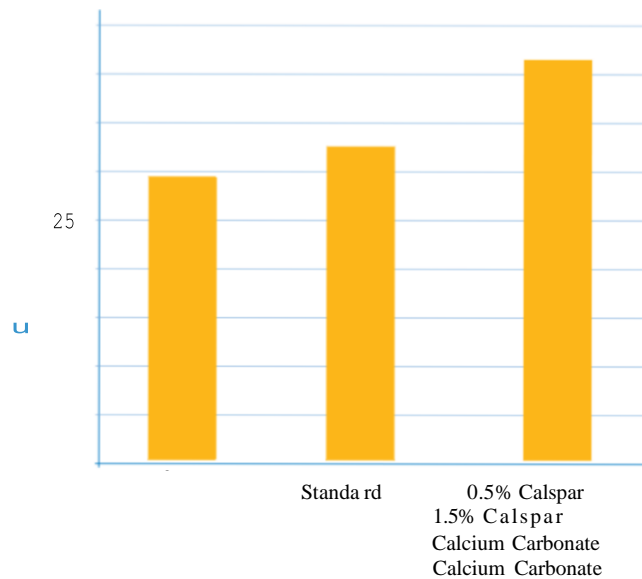


Figure 1: The graph represents the correlation between the cereals crispness and the amount of Calspar Calcium Carbonate added to the standard cereal. The crispness is expressed as the maximum force (N) measure by texture analysis on the different cereals.

Snacks



CALPure can improve multiple parameters of extruded snack properties. A concentration of 1.5% Calspar's **CALPure** is recommended for an improved expansion index, increased hardness and good crispness in corn-based snacks. This is an interesting solution when making not only plain snacks, but also filled snack products.

Moreover, snacks containing CALPure show prolonged crispness, less stickiness and also have an enhanced perception of saltiness. The snack surface is rough but – thanks to CALPure – more even, leading to a homogenous appearance, especially at the cut edges.

Expansion index of snacks based on Corn flour

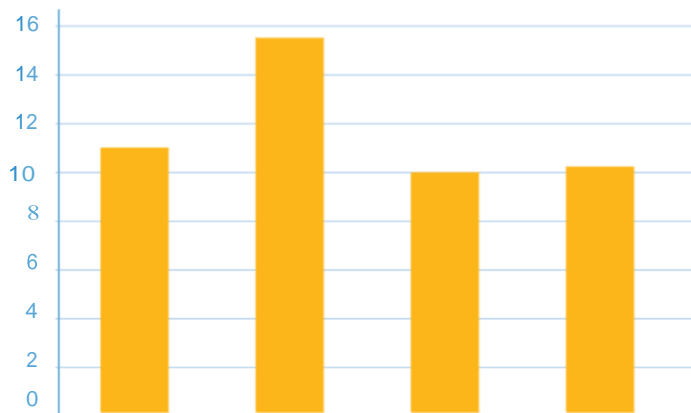


Figure 2:

The graph shows the role of Calcium Carbonate in the expansion process. It represents the correlation between the expansion index, the particle size and the amount of Calcium Carbonate.

The expansion index is measured with the following equation:

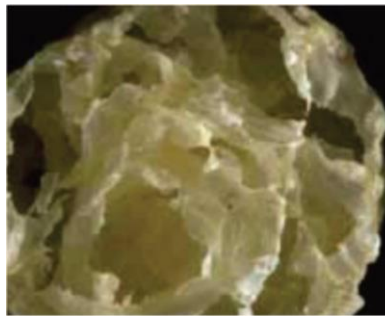
Where FE/ is the expansion index (dimensionless),
 D , is the diameter of the extrudate (cm)



PORE SIZE DISTRIBUTION



Snack with 1% CALPure



Snack without extrusion aid

- More gas cells and better Distribution.
- Improved snack expansion
- More even and homogenous snack surface
- Dosages as low as 1% Already show affect

***Improve your diet with a crunchy bite,
by adding CALPure Calcium
Carbonate to extruded inclusions in
your favorite snack.***

FOR MORE INFORMATION PLEASE CONTACT:



CALSPAR INDIA

(An ISO 9001-2015 and FSSAI Certified Company)

Manufacturers of Various Grades of Calcium Carbonate

Head Office: 21/57, E.C. Road, Dehra Dun – 248001 (Uttarakhand).

Website: www.calsparindia.com, Email info@calsparindia.com, Mobile: 9927122466