

NORDKALK ENRICH C COST SAVINGS BY SUBSTITUTING TiO_2

Nordkalk Enrich is an ultrafine precipitated calcium carbonate (PCC) product created to replace titanium dioxide and binder in paints and coatings. The multi-functional product innovation of Nordkalk Enrich has increasingly generated greater attention across the market, creating value in various fields of application in paints & coatings, adhesives, paper, inks and building materials.



REPLACING TiO_2
10-25%

COST SAVINGS

With the assistance of Nordkalk Enrich C, the need for titanium dioxide (TiO_2) and binder will be partially eliminated, contributing to a significant reduction in raw material costs without compromising on crucial technical performance in the end products. In reference to the commercial use of Nordkalk Enrich, the edge it offers results in significant cost savings (5-15%) through reduced consumption of TiO_2 and binders.

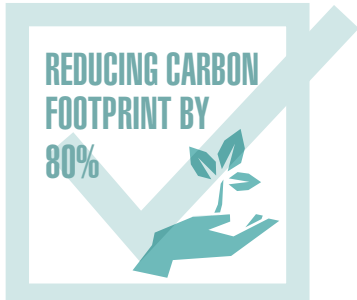


DESIRED GLOSS &
SCRUB RESISTANCE

SUPERIOR TECHNICAL PERFORMANCE

Thanks to its superior product features, Nordkalk Enrich C does not endanger the functionality or technical performance of the application despite its remarkable substitutions. By contrast, commercial references have demonstrated that the product improves performance in the technical properties of paints.


In glossy paints, Enrich C enables twice the amount of filling (PVC) while maintaining the high-level gloss, hiding power and wet-scrub resistance. In addition, Nordkalk Enrich C demonstrably gives rise to new development opportunities and enhances technical performance such as abrasion resistance, fire retardation and adhesion.



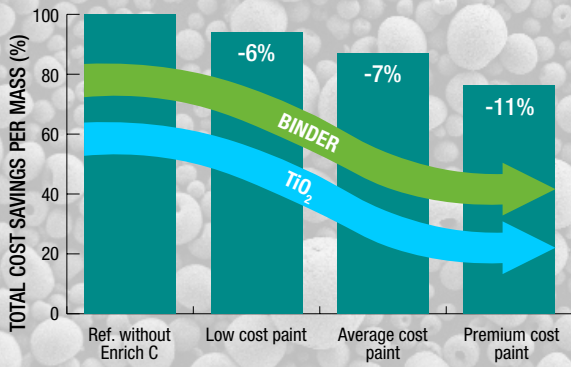
REDUCING CARBON
FOOTPRINT BY
80%

SUSTAINABLE SOLUTION

As a pure, nature-originated product, Nordkalk Enrich C is an environmentally friendly choice for coping with more stringent environmental objectives and advancing sustainable development, such as carbon footprint reduction.

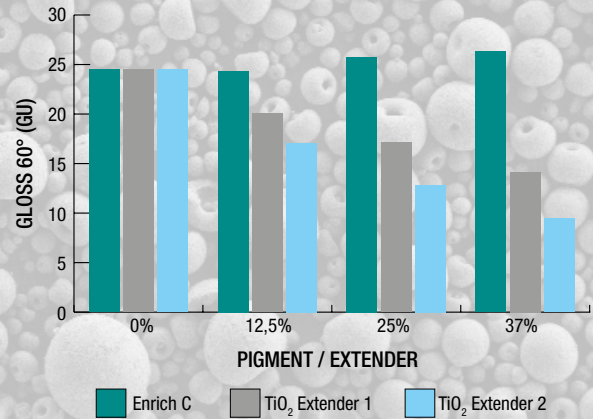


COST SAVINGS

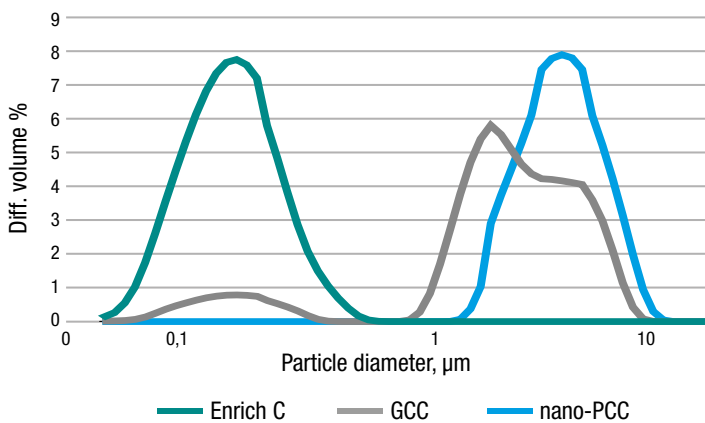


Replacing TiO_2 with Nordkalk Enrich C reduces costs without compromising performance.

TECHNICAL PERFORMANCE GLOSS



PARTICLE SIZE IN APPLICATION



With its clear edge over the pigment extenders on the market, Enrich is composed of homogenous ultrafine ($d_{50} \sim 130$ nm) particles. The customised ultrafine particles are smaller than titanium dioxide, preventing pigment particles from agglomerating.

Enrich particles tend to enter the voids in the paint mixture, creating a more efficient TiO_2 spacing effect. In addition, the particles fill the paint surface, which intensifies its light reflection, achieving a distinct gloss improvement.

PRODUCT PORTFOLIO

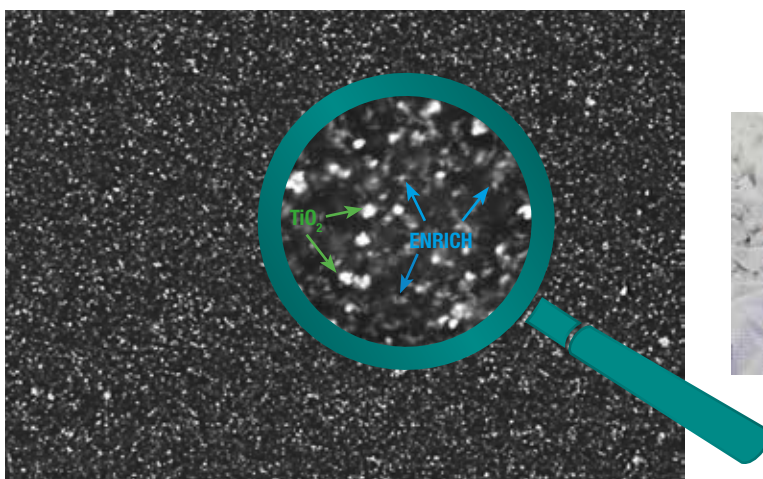
The Nordkalk Enrich product range offers two products for coatings, dry powder Enrich C and dispersion Enrich C 50.

| TECHNICAL SPECIFICATIONS | UNIT | ENRICH C | ENRICH C 50 |
|-----------------------------|------------|--------------|------------------|
| Dry matter content | % | >99 | 50 |
| Bulk density | g/cm^3 | 0.75 | 1.45 |
| pH-value in dispersion | | 7 - 9 | 7 - 9 |
| Appearance (25 °C) | | White powder | White dispersion |
| Viscosity (25 °C) | mPAs | | <500 |
| Granule size $d_{50}\%$ | μm | 25 | |
| Particle Size in dispersion | | | |
| | $d_{50}\%$ | nm | ~ 130 |
| | $d_{90}\%$ | nm | ~ 300 |

The Enrich product portfolio offers products for other applications as well.

Dry powder Enrich A and dispersion Enrich A 50 are tailored for adhesive applications providing mechanical properties such as adhesion and tensile strength and good dispersion stability.

Enrich P brings numerous new development opportunities for the paper and packaging industries.



10 μm EHT = 10.00 kV Signal A = BSD
WD = 4.9 mm Mag = 1.00 K X



PLEASE CONTACT US TO FIND OUT MORE.

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