

zirmil[®]

Ultimate
performance
at the
right price

Ultimate

performance

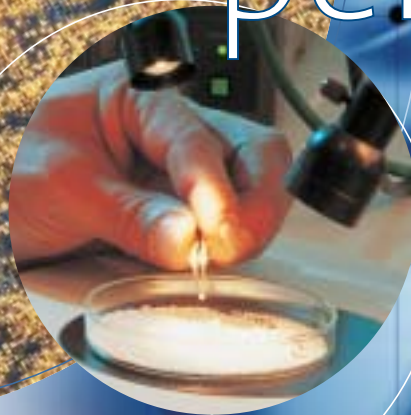
at the right price

zirmil[®]



Improvement of mill productivity
Maintenance reduction
Cost reduction
Diverse applications

Developed by
Saint-Gobain ZirPro,
Zirmil is now the most advanced
product on the market
of microgrinding ceramic beads.
This new range of yttria
stabilized zirconia beads
is designed to suit
the most demanding
operational conditions
at a very low cost



zirmil[®] performa

ONE PRODUCT, NUMEROUS APPLICATIONS

Zirmil beads can be used in traditional mills, high-energy mills, and high flow recirculation processes. They are suitable for grinding high viscosity or abrasive pastes, or any other formulation requiring no contamination, such as the grinding of suspensions in electronic ceramics (PZT). Zirmil's main applications are the grinding of inks, automotive paints, mineral fillers, pigments...





THE MATERIAL THAT MAKES THE DIFFERENCE

Saint-Gobain ZirPro's know-how in the manufacturing process of zirconium oxide powders is affirmed by the production of the yttria zirconia powder used as raw material for Zirmil.

Made through an unique and complex process, this powder achieves performance levels that really make the difference: **stable quality from batch to batch, purity, reactivity, easy shaping, attractive price.**

Thanks to the powder, shaped and sintered at high temperatures, **Zirmil beads have a very fine microstructure leading to their excellent wear resistance.**



nice & efficiency

THE PROCESS THAT MAKES THE DIFFERENCE

Our unique manufacturing process implements complex and innovative technologies, results of years of high level research. The process is based on the ceramic powder sintering and **its precise control** leads to the application properties.

Results: a very good density (no residual porosity) and homogeneity of the yttrium oxide within the zirconia, controlled with a microprobe. This last point is essential to the excellent performance of the beads in their various industrial uses.

The whole process is totally controlled and guarantees strict conformance to the specification at the lowest cost.



THE BEAD QUALITY THAT MAKES THE DIFFERENCE

- ~ **One of the densest products on the market:** grinding efficiency - namely the fineness of milled particles, their size distribution, color development, formulation brightness and the equipment productivity - depends largely on density. Zirmil has a bead density of 5.9 g/cm³ (more than one and a half times that of the ER120 range) and a weight per liter of 3.6 kg/l.
- ~ **High Vickers hardness: 1,200 HV,** allowing the grinding of very abrasive formulations without damaging the media and thus avoiding an overconsumption of beads and formulation pollution.
- ~ **Available size distributions** are very narrow and perfectly controlled (from 0.5 to 2.5 mm) thus resulting in a better control of the milled formulation.

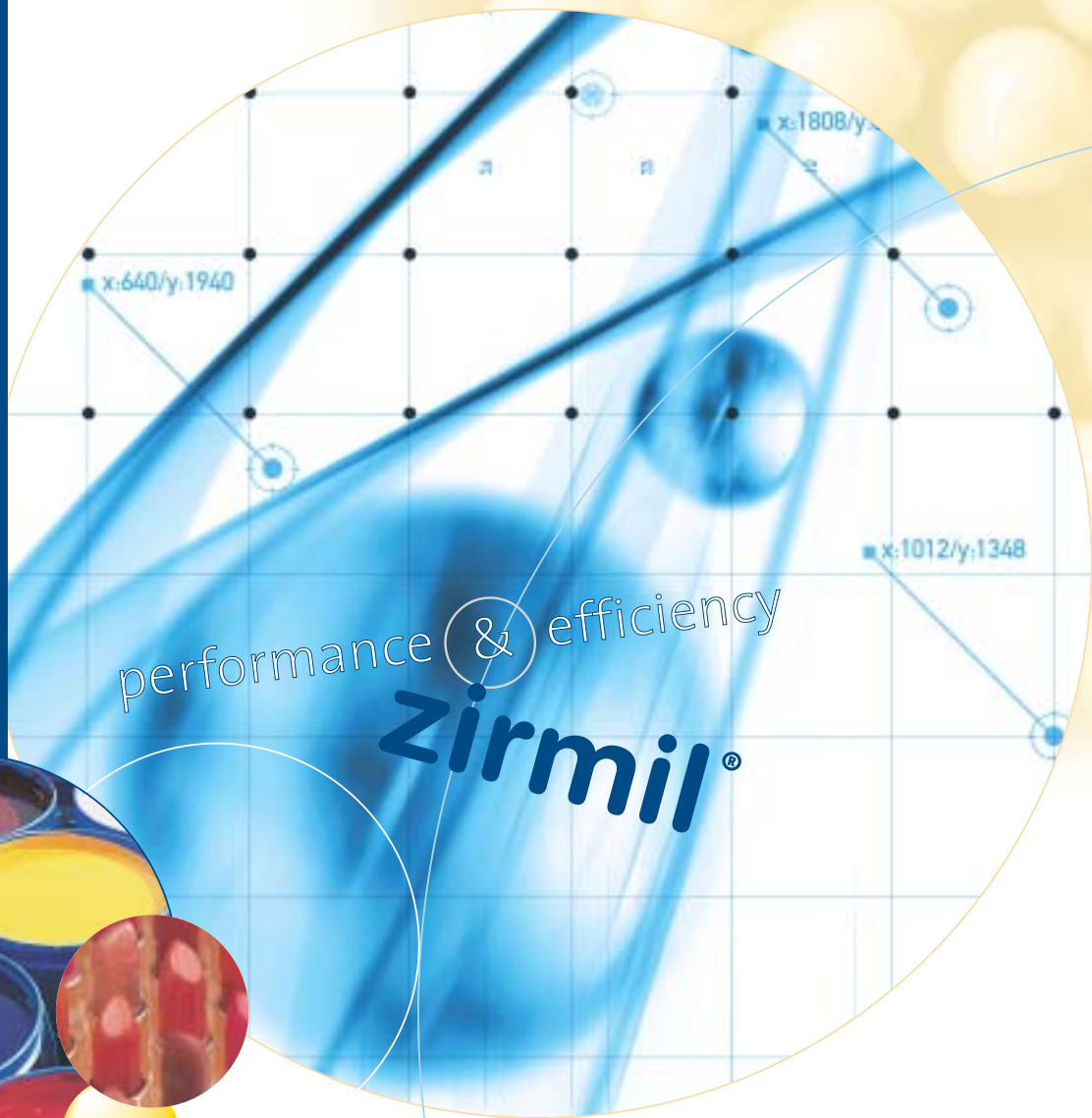


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