



Antibacterial Nano Porous Glass and the Application of Antibacterial Filter

□ Introduction

The skeleton of antibacterial nanoporous glass is a glass structure composed of silicon oxide, boron oxide, and aluminum oxide, which makes it highly chemical resistant and stable. It also uses patented nano porous technology to make the glass filled with pores and with a pore diameter of 2 nm to 20 nm, resulting in a specific surface area of about 200 m²/g. After grinding process, the particle with micron-size scale can exhibit good antibacterial property of nanoscale metal in the pore, and can withstand various composite processing temperatures. Therefore, it can be added and used in the production of various antibacterial composite products.

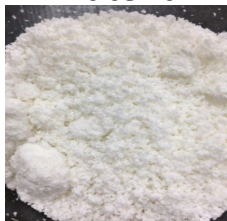
□ Application process

Nano porous technology

Nanoporous materials adsorption system

LCD glass

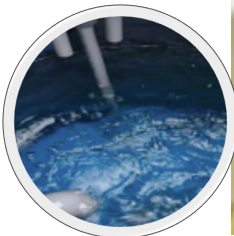
Nano porous material



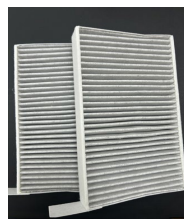
Cu: 20.3 ppm

low-conc. electroplating processes

Cu < 0.1 ppm



Cu > 15%



Anti-bacteria :

E. coli > 99%

S. aureus > 99%

Filtration : PM0.3 > 99%

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