

ABSTRACT

DISPERSION OF ZIRCONIUM OXIDE AND
PROCESS FOR PRODUCING THE SAME

The invention provides a process for producing an aqueous dispersion of zirconium oxide comprising: reacting a zirconium salt with an alkali in water to obtain a slurry of particles of zirconium oxide; filtering, washing, and repulping the slurry; adding an organic acid to the resulting slurry in an amount of one mole part or more per mole part of the zirconium in the slurry; hydrothermally treating the resulting mixture at a temperature of 170°C or higher; and washing the resulting aqueous dispersion of particles of zirconium oxide.

The invention also provides a process for producing an aqueous dispersion of solid solution of zirconium oxide containing at least one stabilizing element selected from aluminum, magnesium, titanium, and rare earth elements.

The invention further provides a process for producing a dispersion of zirconium oxide of which dispersion medium is an organic solvent, the process comprising replacing the dispersion medium of the aqueous dispersion of zirconium oxide obtained by the process mentioned above by the organic solvent.

No Figure