

## The influence of template's origin on textural characteristics of *meso*-structured alumina

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### Abstract

Meso-structured alumina possessing homogeneous cylindrical pores has been produced by template sol-gel method. Ionic (cetyltrimethylammonium bromide, sodium stearate, oleic acid) or nonionic (polyethylene glycol, PEO-4000; poly(ethyleneoxide)<sub>20</sub>-poly(propyleneoxide)<sub>70</sub>-poly(ethyleneoxide)<sub>20</sub> Pluronic P123-P123) surfactants were used as the template. The influence of template's origin and that of synthesis conditions on textural properties of *meso*-structured alumina have been investigated by method of low-temperature nitrogen adsorption. It has been ascertained that textural properties of *meso*-structured alumina (specific surface area, volume and size of mesopores, pore size distribution) are significantly determined by template's origin and by synthesis conditions.