TECHNOLOGY CARD

PLAPIQUI

#1307

Talc purification process

SUSTAINABLE PROCESS FOR PURIFICATION AND SUBMICRONIZATION OF TALC PARTICLES

DESCRIPTION

Process involves an acid treatment to purify or submicronize talc particles containing up to 40% of associated minerals. This procedure also allows to recover and reuse, through selective precipitation, cations of gangue minerals avoiding toxic residues. High purity nanotalc particles are obtained.

APPLICATIONS

Mining industry | Nanocomposites | Paints | Plastic additives | Industrial talc |

ADVANTAGES

- Purified and delaminated talc particles
- Byproducts can be reused in the same process
- Byproducts have commercial value
- Sustainable process without residuals
- Resulting particles suitable for many applications
- Talc particles morphology conservation

DEVELOPMENT STATUS

Process probed at laboratory scale. It is suitable to be scaled up.

INTELLECTUAL PROPERTY STATUS

Granted Patent up to 25/03/2030 AR075937B1 (Argentine)

RESEARCHERS

Luciana Castillo, Silvia Barbosa

CONTACT US

Office of Technology Transfer

ott@plapiqui.edu.ar
plapiqui.edu.ar/ott
+54 291 4037200 - Int 217/214
+54 9 291 4261644

CONICET UNS