

Adsorpsi Logam Kadmium dari Air dengan Karbon Aktif melalui Sistem Kontinu

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20305769&lokasi=lokal>

Abstrak

The maximum Cadmium content in tap water based on Drinking Water Standard Quality of DKI Local Government, is 0,01 mg/L. This experiment is aimed to reduce Cadmium content by adsorption process using 8-10 mm granular activated Carbon. By using continuous system to adopt the real condition and the contact time during isothermal adsorption and the time needed to achieve equilibrium conditions are observed. The granular carbon is heated at 100 °C for 24 hours and the surface area changes from 555,6 m²/gr to 597,6 m²/gr. The system reaches breakthrough curve after 14 hours for 10 minutes contact time and 18 hours for 20 minutes.