

BAB V

KESIMPULAN DAN SARAN



KESIMPULAN

Berdasarkan hasil penelitian sintesis superabsorben dari natrium alginat yang telah diperoleh maka dapat ditarik kesimpulan:

1. Superabsorben dengan rasio monomer AA:Aam sebesar 1:1 menghasilkan nilai *Equilibrium Swelling* yang paling tinggi yaitu 98,1307 g/g
2. Superabsorben dengan rasio monomer AA:Aam 1:0 menghasilkan nilai *Equilibrium Swelling* yang lebih tinggi dibandingkan dengan superabsorben dengan rasio monomer AA:Aam 0:1
3. Penggunaan bentonit menurunkan nilai *Equilibrium Swelling* superabsorben
4. Secara keseluruhan nilai *Equilibrium Swelling* lebih tinggi pada pH air netral dibandingkan dengan pH air asam atau basa

SARAN

Saran yang dapat disusun untuk penelitian selanjutnya berdasarkan proses penelitian yang sudah ditempuh dan hasil penelitian yang diperoleh adalah:

1. Menentukan rasio bentonit dan natrium alginat yang tepat agar penggunaan bentonit meningkatkan nilai *Equilibrium Swelling* produk
2. Melakukan analisa *Fourier Transform Infrared Spectroscopy* pada natrium alginat, bentonit, serta superabsorben tanpa bentonit dan dengan bentonit untuk menentukan ikatan kimia yang ada dalam polimer
3. Melakukan analisa *Scanning Electron Microscopy* (SEM) untuk mengetahui morfologi dari superabsorben
4. Sintesis superabsorben dilakukan pada reaktor yang dapat terlihat bagian dalamnya sehingga fenomena yang terjadi di dalam reaktor dapat teramati



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