BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitian yang telah dilakukan dapat diambil kesimpulan sebagai berikut :

1. Reaktan vinil laurat memperoleh DS (Derajat Subtitusi) yang lebih besar dari metil laurat.
2. Semakin tinggi perbandingan rasio mol reaktan terhadap xanthan gum, maka DS (Derajat Subtitusi) xanthan laurat yang dihasilkan semakin tinggi.
3. Peningkatan rasio mol katalis akan meningkatkan nilai DS (derajat subtitusi) produk xanthan laurat.
4. Analisa FTIR menunjukkan nilai absorbansi gugus karbonil produk modifikasi lebih besar dari xanthan gum murni yang menyatakan bahwa reaksi transesterifikasi berhasil.
5. Analisis TGA menunjukkan adanya peningkatan degradasi termal pada produk xanthan laurat dibandingkan dengan xanthan gum murni.
6. Analisis SEM menunjukan aglomerasi pada nilai DS (derajat subtitusi) xanthan laurat yang lebih besar

5.2 Saran

Berdasarkan hasil penelitian yang telah dilakukan, saran yang dapat diberikan untuk penelitian selanjutnya adalah sebagai berikut :

1. Perlu dilakukan percobaan kembali mengenai temperatur, waktu reaksi, dan rasio mol tertentu agar mendapatkan nilai DS yang lebih baik.
2. Perlu dilakukan percobaan lebih lanjut mengenai gugus yang mengalami depolimerisasi terlebih dahulu pada xanthan laurat saat mengalami peningkatan suhu

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