Pengurangan kadar amonia pada limbah minyak PT. Chevron, Duri dengan metode elektrolisis = Ammonia removal from PT. Chevron duri's waste using electrolysis

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Abstrak

ABSTRAK
Pengurangan kadar amonia pada limbah minyak PT. Chevron, Duri dilakukan dengan metode elektrolisis. Kondisi optimum didapatkan dengan melakukan elektrolisis larutan amonium sulfat di berbagai pH pada potensial 0,6V; 1,5V; dan 2V. Penambahan NaCl pun dilakukan pada elektrolisis amonium sulfat. Hasil percobaan menunjukkan elektrolisis amonium sulfat pada pH 10 menggunakan potensial 2V dan ditambahkan NaCl memiliki penurunan hingga 67,48%. Akan tetapi, kondisi optimum ini tidak diterapkan pada limbah minyak karena kadar amonia di dalam limbah minyak terlalu kecil. Elektrolisis amonia dalam limbah minyak dilakukan pada pH 8 tanpa penambahan NaCl dengan potensial sebesar 2V. Penurunan kadar amonia pada limbah minyak mencapai 61,81%.
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ABSTRACT
The removal of ammonia levels in the oil waste PT. Chevron, Duri was done by electrolysis method. The optimum conditions were obtained by the electrolysis of ammonium sulphate solution at various pH at some potential of 0,6V; 1,5V; and 2V. The amount of NaCl addition was also varied on the electrolysis of ammonium sulphate. The experimental results showed that at pH 10 using the potential of 2V and the present of NaCl had decreased the amount of ammonia content as much as 67,48%. However, these optimum conditions were not applied to the oil waste because ammonia levels in the waste oil was too small. The electrolysis of ammonia in the oil waste was performed at pH 8 without the addition of NaCl with a potential of 2V. Decreased levels of ammonia in the waste oil reached 61,81%.