

ABSTRAK

PRARANCANGAN PABRIK AMIL ASETAT DARI ASAM ASAM ASETAT DAN AMIL ALKOHOL KAPASITAS 30.000 TON/TAHUN (Perancangan *Distillation Coloumn* (MD-301))

Oleh

FAZA AMALIA

Amil asetat merupakan salah satu bahan kimia yang digunakan sebagai pelarut (*solvent*) pada industri cat, bahan pembuatan parfum, dan pemberi aroma pisang pada industri makanan. Bahan baku yang digunakan adalah asam asetat sebanyak 2.059,8333 kg/jam dan amil alkohol sebanyak 2.587,9204 kg/jam. Kapasitas produksi pabrik direncanakan sebesar 30.000 ton/tahun dengan 330 hari kerja dalam 1 tahun dan didirikan di Bringin, Kab. Semarang, Jawa Tengah. Bentuk perusahaan adalah badan usaha Perseroan Terbatas (PT) menggunakan struktur organisasi *line and staff* dengan jumlah karyawan sebanyak 179 orang.

Analisa ekonomi Prarancangan Pabrik Amil Asetat sebagai berikut:

<i>Fixed Capital Investment</i> (FCI)	= Rp549.777.089.411,-
<i>Working Capital Investment</i> (WCI)	= Rp97.019.486.366,-
<i>Total Capital Investment</i> (TCI)	= Rp646.789.575.777,-
<i>Break Even Point</i> (BEP)	= 44,70%
<i>Shut Down Point</i> (SDP)	= 25,81%
<i>Pay Out Time after Taxes</i> (POT) ^a	= 2,29 tahun
<i>Return on Investment before Taxes</i> (ROI) ^b	= 35,77%
<i>Return on Investment after Taxes</i> (ROI) ^a	= 28,62%
<i>Discounted Cash Flow</i> (DCF)	= 35,79%

Berdasarkan pertimbangan diatas, sudah selayaknya pendirian pabrik Amil Asetat ini dikaji lebih lanjut karena merupakan pabrik yang menguntungkan dan mempunyai prospek yang baik.

Kata kunci: Amil Asetat, Asam Asetat, Amil Alkohol, Ekonomi

ABSTRACT

MANUFACTURING OF AMYL ACETATE FROM ACETIC ACID AND AMYL ALCOHOL CAPACITY 30.000 TONS/YEAR (Design of Distillation Coloumn (MD-301))

Oleh

FAZA AMALIA

Amyl acetate is a chemical used as a solvent in the paint industry, an ingredient in making perfume, and banana flavoring agent in the food industry. The raw materials used consist of 2.059,8333 kg/hour of acetic acid and 2.587,9204 kg/hour of amyl alcohol. Production capacity is planned at 30.000 tons/year with 330 working days in a year and will be established in Bringin, Semarang Regency, Central Java. The company form is a Limited Liability Company (PT) using a line and staff organizational structure with a total of 179 employees.

An economic analysis of preliminary plant design of Amyl Acetate are:

<i>Fixed Capital Investment (FCI)</i>	= Rp549.777.089.411,-
<i>Working Capital Investment (WCI)</i>	= Rp97.019.486.366,-
<i>Total Capital Investment (TCI)</i>	= Rp646.789.575.777,-
<i>Break Even Point (BEP)</i>	= 44,70%
<i>Shut Down Point (SDP)</i>	= 25,81%
<i>Pay Out Time after Taxes (POT)^a</i>	= 2,29 tahun
<i>Return on Investment before Taxes (ROI)^b</i>	= 35,77%
<i>Return on Investment after Taxes (ROI)^a</i>	= 28,62%
<i>Discounted Cash Flow (DCF)</i>	= 35,79%

Based on the above considerations, the establishment of the Amyl Acetate factory should be studied further, because it is a profitable factory and has a good prospect.

Key words: Amyl Acetate, Acetic Acid, Amyl Alcohol, Economic