



TECHNOBELL
TECHNOLOGY

Plasticizers

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Plasticizers are additives that increase the plasticity or fluidity of the material to which they are added, these include plastics, cement, concrete, wallboard and clay bodies. Although the same compounds are often used for both plastics and concretes, the desired effect is slightly different.
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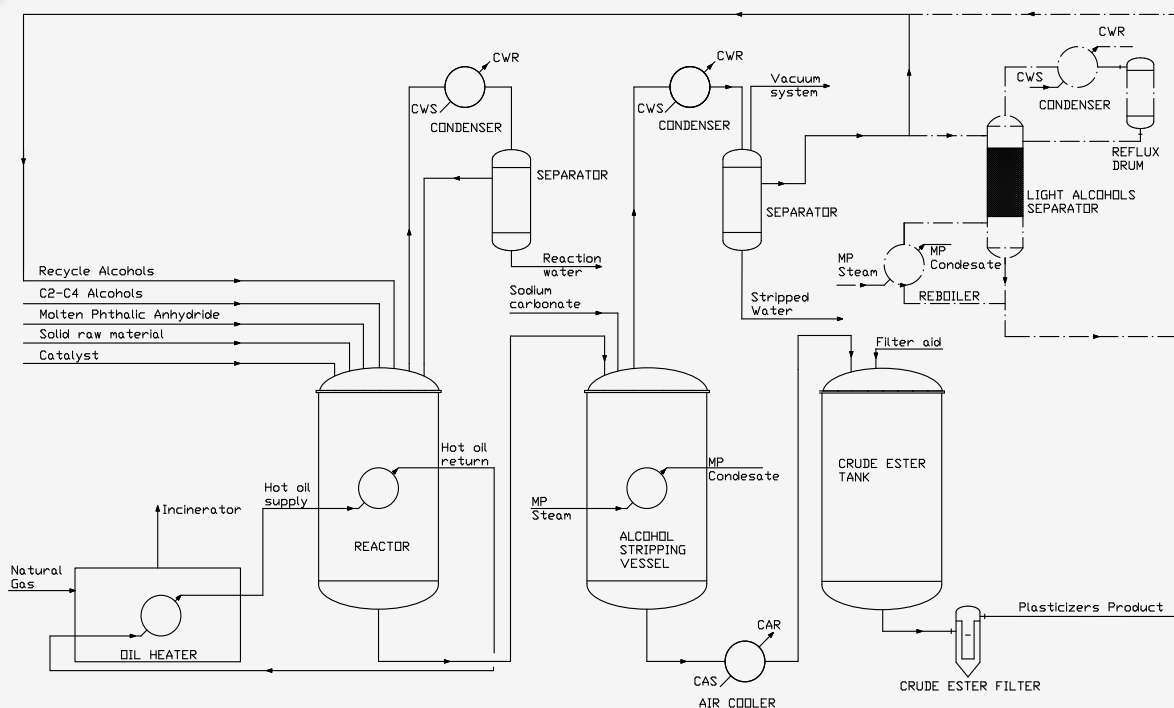
Raw material and chemicals consumption in kg/ton of product:

	DBP	DOP	DINP	DPHP	DIDP
Phthalic anhydride	542	383	365	345	350
n - butanol	560	-	-	-	-
2-ethyl-hexanol	-	680	-	-	-
Iso-nonyl-alcohol	-	-	710	-	-
Iso-decyl-alcohol	-	-	-	730	-
2-propyl-heptanol	-	-	-	-	725
Catalyst	1	1	1	1	1
Sodium Carbonate	4	2	4	4	4
Filter Aid	4	4	4	4	4

Technobell can offer to the clients plants designed to produce different plasticizers: phthalates, maleates, sebacates, trimelitates and others. Once defined the production range of plasticizers during contracting

the plant is specifically designed to allow easy interchangeability between production range. Also based on the required production capacity of each plasticizer different reactor and so production line sizes can be used.

Process Scheme



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The given data are for information purposes only and may be subject to change without prior notice.

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Main advantages of the process:

- **Stabile quality**
Highly accurate control both of the time/temperature diagram of the reactor obtains the best possible results and avoids the formation of by-products. The supplied laboratory equipment allows performing input (raw material), inter-phasing (production) and outputting (product) control.
- **Improved plasticizers quality**
There are less possible side reactions that produce volatile and colored by products. The plasticizers color is less dependent on phthalic anhydride quality.
- **Improved ecology**
The titanate estrefication process requires up to 90% less water in crude plasticizers "washing" step, so that the waste water which contaminate the environment.
- **Higher yields**
The conversion to plasticizers is very high, over 99% and also the losses in the purification step are significantly reduced, because of the reduction of "washing" water.
- **Low alcohols excess**
Emission's in line with EU regulative.
- **Long term experience**
in plasticizers production and flexibility of our organization which enables us to solve you all problems connected with plasticizers production.





Services

TECHNOBELL is a long-standing engineering company specialising in the process and project design. In field of plasticizers we supply our clients with know-how, technology and equipment/machines for process lines as well as turnkey plant, including engineering, procurement, construction, training, commissioning and initial assistance in marketing.

