

Improved process for coproduction of 6-aminocapronitrile and hexamethylenediamine

5 Abstract

A process for the coproduction of 6-aminocapronitrile and hexamethylenediamine starting from adiponitrile by

- 10 a) hydrogenating adiponitrile in the presence of a catalyst comprising an element of the eighth transition group as catalytically active component, to obtain a mixture comprising 6-aminocapronitrile, hexamethylenediamine, adiponitrile and high boilers,
- 15 b) distillatively removing hexamethylenediamine from the mixture comprising 6-aminocapronitrile, hexamethylenediamine, adiponitrile and high boilers, and either
- 20 c1) distillatively removing 6-aminocapronitrile, and then
- d1) distillatively removing adiponitrile, or
- 25 c2) simultaneously distillatively removing 6-aminocapronitrile and adiponitrile into separate fractions
- 30 is characterized by base of column temperatures below 185°C in steps d1) or c2).

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