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Abstract

1. Process which may be performed continuously for the production of methionine or methionine derivatives.
- 2.1 Direct saponification of the methionine nitrile obtainable from methylmercaptopropionaldehyde, hydrocyanic acid and ammonia led to low yields, to catalyst and educt losses and to undesirable by-products. The object is thus to provide a process which may be performed with low losses, without isolation of the intermediate stages, and in particular continuously.
- 2.2 The ketone used is recovered with higher yields after amide saponification as this reaction liberates ketone from by-products. For recirculation of the ammonia, ketone must be substantially removed from it, wherein a resultant ammonia/ketone/water mixture is separated in a column under a pressure above atmospheric. If the amide is saponified at $\geq 160^{\circ}\text{C}$, amide concentrations of ≤ 25 wt.% are advantageous. The methionine nitrile is formed with at least 4 eq of ≥ 50 wt.% ammonia at 40 to 80°C and for 5 to 60 minutes. Residues of cyanide are destroyed at temperatures of above 150°C .
- 2.3 Methionine, in particular for feedstuffs, in particular in aqueous solution.

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