

Title (en)

METHOD OF PREPARING N-PHOSPHONOMETHYL IMINODIACETIC ACID

Title (de)

VERFAHREN ZUR HERSTELLUNG VON N-PHOSPHONOMETHYLIMINODIESSIGSÄURE

Title (fr)

PROCEDE DE PREPARATION D'ACIDE N-PHOSPHONO METHYLIMINO DIACETIQUE

Publication

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Application

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Priority

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Abstract (en)

[origin: DE19914375A1] In the production of N-phosphonomethyliminodiacetic acid (PMIDA) by: (a) neutralizing an aqueous solution of the sodium salt of iminodiacetic acid (IDA) with a strong mineral acid (I) at 10-80 deg C; (b) separating IDA; (c) conversion to PMIDA by reaction with formaldehyde and phosphorous acid in aqueous solution in the presence of (I) at 100-150 deg C; and (d) separating PMIDA e.g. by filtration, the mother liquor from (d) is recycled to stage (a). Production of N-phosphonomethyliminodiacetic acid (PMIDA) involves: (a) neutralizing an aqueous solution of the sodium salt (Na2IDA) of iminodiacetic acid (IDA) with a strong mineral acid (I) at 10-80 deg C, (b) separating IDA from the solution, (c) conversion to PMIDA by reacting IDA with formaldehyde and phosphorous acid in aqueous solution in the presence of (I) at 100-150 deg C, optionally under a protective gas atmosphere and (d) separating PMIDA e.g. by filtration. The novelty is that the mother liquor from (d), with small amounts of PMIDA, reactants and by-products from stage (c), is recycled to stage (a).

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