

formed which were washed and dried. The nuclear magnetic resonance spectrum and nitrogen analysis proved the preparation of the sodium salt of dimethylaminoacetic acid. The yield of the sodium salt of dimethylaminoacetic acid was 78.5%.

#### EXAMPLE III

As in the method of Example II, 1.0 mol N-phenyl-diethanolamine, 3.0 mols sodium hydroxide, 150 grams water and 10 grams cadmium oxide were heated at a temperature of 270° C. for 30 minutes. The reaction mixture was worked up as in Example II except that the reaction mixture was first acidified to a pH of 2.8. The light yellow solid product was washed with ice water and dried in a vacuum desiccator. The nuclear magnetic resonance and the infrared spectra confirmed the structure of the product as N-phenyliminodiacetic acid. The yield of the diacetic acid was 86.5% basis the N-phenyldiethanolamine charged.

#### EXAMPLE IV

As in the previous examples, except that a copper-lined reactor was employed, 0.5 mol N-nonyldiethanolamine, 2.0 mols sodium hydroxide, 80 grams water and 6 grams cadmium oxide were heated at 275° C. for 30 minutes. The reaction mixture was treated and worked up as described in Example III and the yield of the disodium salt of N-nonyliminodiacetic acid was 80%. NMR and infrared spectra analysis confirmed the structure on N-nonyliminodiacetic acid.

#### EXAMPLE V

In a 1-liter stirred Monel lined reactor were admixed 1.0 mol bis(hydroxyethyl)piperazine, 4.0 mols sodium hydroxide, 164 grams water, and 10 grams cadmium oxide. The reaction mixture was heated under nitrogen for 15 minutes at 261° C. to 273° C. The reaction mixture was dissolved in 550 ml. water with gentle heating. The mixture was filtered and allowed to cool. White long needles formed and were recovered by filtration. Disodium salt of piperazine diacetate in the amount of 184.8 grams were recovered. The structure was confirmed by infrared analysis, NMR spectra analysis as well as nitrogen analysis and electrometric titration.

#### EXAMPLE VI

In a stirred copper-lined Hastelloy B autoclave were placed dodecyliminodiethanol (prepared from 1-chlorododecane and diethanolamine, hydroxyl number 421), 147.5 grams sodium hydroxide, 135 grams water, and 6.4 grams cadmium oxide and heated 22 minutes at 270° C. to 280° C. Maximum pressure was 3,900 p.s.i.

The cooled solidified reaction product was dissolved in a boiling 1:1 mixture of methoxyethanol-water, the turbid solution cleared with Super-Cel filter aid and cooled. The precipitated reaction product was dried at 100° C. in vacuum. Yield was 166 grams. NMR and IR data agreed with the structure of dodecyliminodiacetic acid (sodium salt).

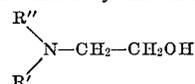
Surface tension of the product was 29 dynes/cm. in 0.1% aqueous solution. Ross-Miles test indicated a foam height of 173/165 mm. after 5 minutes.

The preceding examples can be repeated with similar success by substituting the generically and specifically described reactants and conditions of this invention for those employed in the examples. As will be evident to those skilled in the art, various modifications of this invention can be made or followed in light of the discussion and disclosure herein set forth without departing from the spirit or the scope thereof.

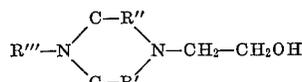
We claim:

1. An aqueous process for preparing aminocarboxylic acid salts comprising the steps of heating an aminoalcohol in the presence of at least a stoichiometric quantity, based upon the aminoalcohol employed, of sodium hydroxide, cadmium salts, and sufficient water to maintain the com-

ponents in the reaction medium in solution, said aminoalcohol being represented by the following formula:



wherein R' represents hydrogen or a group selected from —CH<sub>2</sub>CH<sub>2</sub>OH, a C<sub>1</sub> to C<sub>15</sub> alkyl, or an aminoalkyl group having two to three carbon atoms; and R'' represents hydrogen or a group selected from phenyl, a C<sub>1</sub> to C<sub>15</sub> alkyl substituted phenyl, or a C<sub>1</sub> to C<sub>15</sub> alkyl; and wherein each R' and R'' can also represent methylene groups or lower C<sub>1</sub> to C<sub>3</sub> alkyl substituted methylene groups, such that when taken with N—CH<sub>2</sub>CH<sub>2</sub>OH they comprise a portion of an N-substituted piperazine compound which compound can be further represented by the following formula:



wherein R''' represents hydrogen, or a group selected from a C<sub>1</sub> to C<sub>4</sub> alkyl or —CH<sub>2</sub>CH<sub>2</sub>OH; and wherein said heating is conducted at a temperature in the range of about 250° C. to 300° C. for a time in the range of about 5 to 45 minutes under a pressure sufficient to maintain the water in liquid phase.

2. The process according to Claim 1 wherein said heating is conducted at a temperature within the range of about 250° C. to 300° C. for a time in the range of about 10 to 35 minutes.

3. The process according to Claim 2 wherein R' represents an aminoalkyl group and R'' represents hydrogen.

4. The process according to Claim 2 wherein R' and R'' represent alkyl groups.

5. The process according to Claim 2 wherein R' represents the —CH<sub>2</sub>CH<sub>2</sub>OH group.

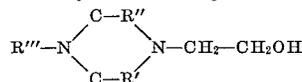
6. The process according to Claim 5 wherein R'' represents the phenyl group.

7. The process according to Claim 5 wherein R'' represents an alkyl substituted phenyl group.

8. The process according to Claim 5 wherein R'' represents hydrogen.

9. The process according to Claim 5 wherein R'' represents an alkyl group.

10. The process according to Claim 2 wherein R' and R'' represent methylene groups such that when taken with >N—CH<sub>2</sub>—CH<sub>2</sub>—OH they comprise a portion of an N-substituted piperazine compound which compound can be further represented by the following formula:



wherein R''' represents hydrogen, or a group selected from a C<sub>1</sub> to C<sub>4</sub> alkyl or —CH<sub>2</sub>CH<sub>2</sub>OH.

11. The process according to Claim 10 wherein R''' represents —CH<sub>2</sub>CH<sub>2</sub>OH, and wherein R' and R'' each represent methylene groups.

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260—518 R, 531 C, 534 E, 534 R, 584 R