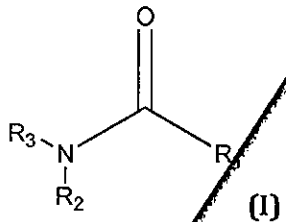
Claims:

1. A method of isolating and recovering a compound according to the formula (I) from a reaction mixture comprising said compound in a reaction solvent, characterized in that, prior to removal of the reaction solvent by evaporation, an extraction solvent for the compound, having a higher boiling point than the reaction solvent, is added to the reaction mixture, and wherein after separation of the compound from the reaction solvent, the compound of formula (I) is recovered in the form of a stock solution in said extraction solvent



(I)

Wherein

R_1 together with the carbonyl group to which it is attached is a residue of a carboxylic acid, and NR_2R_3 , in which R_3 is H or together with R_2 and the N-atom to which they are attached, a 5-membered ring, is a residue of an amino acid, in particular a proteinogenic amino acid, ornithine, gamma–aminobutyric acid or beta alanine, or a 1-amino cycloalkyl carboxylic acid.

2. A method of forming a stock solution a stock solution comprising the steps of isolating and recovering a compound according to the formula (I) as defined in claim 1, from a reaction mixture comprising said compound in a reaction solvent, characterized in that, prior to removal of the reaction solvent by evaporation, an extraction solvent for the compound, having a higher boiling point than the reaction solvent, is added to the reaction mixture, and wherein after separation of the compound from the reaction solvent, the compound of formula (I) is recovered in the form of a stock solution in said extraction solvent.

3. A method according to claim 1 or claim 2 wherein the extraction solvent is selected from the group consisting of water-miscible alcohols or derivatives thereof.

4. A method according to claim 3 wherein the extraction solvent is ethanol, glycerol, propylene glycol, triacetine or miglyol, or mixtures thereof.

5. A method according to claim 3 or claim 4, wherein the extraction solvent is propylene glycol.

6. A stock solution comprising up to 25% by weight of a compound of formula (I) in a solvent selected from water-miscible alcohols or derivatives thereof.

7. A stock solution according to claim 6 wherein the solvent is selected from ethanol, glycerol, ethylene glycol, propylene glycol, triacetine or miglyol, or mixtures thereof.

8. A stock solution according to claim 6 or claim 7, wherein the solvent is propylene glycol.

9. A stock solution according to any of the claims 6 through 8 wherein the compound of formula (I) is present in an amount of up to 15 % by weight.

10. A spray dried powder comprising a compound according to formula (I).

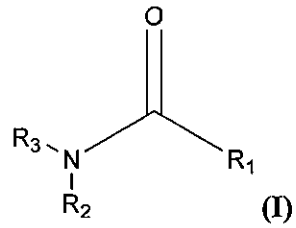
11. A spray dried powder according to claim 10, comprising a carrier material selected from the group consisting of a maltodextrin having a dextrose equivalent (DE) of 3 to 25, or gum Arabic.

12. A spray dried powder according to claim 10 or claim 11 wherein the compound of formula (I) is present in a loading of up to 1.5% by weight based on the total weight of the powder.

13. A spray dried powder according to claim 10 prepared using a stock solution according to any of the claims 6 through

Claims

1. A method of isolating and recovering a compound according to the formula (I)



(I)

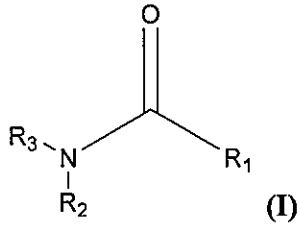
wherein

R_1 together with the carbonyl group to which it is attached is a residue of a carboxylic acid, and NR_2R_3, in which R_3 is H or together with R_2 and the N-atom to which they are attached, a 5-membered ring, is a residue of an amino acid, in the form of a proteinogenic amino acid, ornithine, gamma–aminobutyric acid or beta alanine, or a 1-amino cycloalkyl carboxylic acid; from a reaction mixture comprising said compound in a reaction solvent, the method comprising the steps of:

prior to removal of the reaction solvent by evaporation, adding to the reaction mixture a water miscible alcohol extraction solvent for the compound, said extraction solvent having a higher boiling point than the reaction solvent,

subsequent to the evaporation of and removal of the reaction solvent from the reaction mixture containing the compound of formula (I), the reaction solvent and the extraction solvent, the compound of formula (I) is recovered in the form of a stock solution containing up to 25% by weight of the compound of formula (I) in the extraction solvent wherein the extraction solvent is propylene glycol.

2. A method of forming a stock solution comprising the steps of: isolating and recovering a compound according to the formula (I)



(I)

wherein

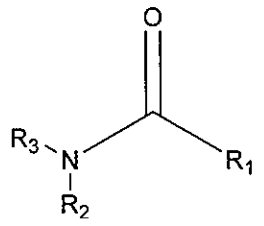
R_1 together with the carbonyl group to which it is attached is a residue of a carboxylic acid, and

NR_2R_3 , in which R_3 is H or together with R_2 and the N-atom to which they are attached, a 5-membered ring, is a residue of an amino acid, and is in the form of a proteinogenic amino acid, ornithine, gamma–aminobutyric acid or beta alanine, or a 1-amino cycloalkyl carboxylic acid;

from a reaction mixture comprising the compound in a reaction solvent, the method comprising the steps of: prior to removal of the reaction solvent from the reaction mixture by evaporation, adding to the reaction mixture a water miscible alcohol extraction solvent for the compound, which has a higher boiling point than the boiling point of the reaction solvent, and,

subsequently separating the compound according to formula (I) from the reaction solvent, and recovering from the reaction mixture a stock solution containing up to 25% by weight of the compound wherein the extraction solvent is propylene glycol.

3. A stock solution comprising up to 25% by weight of a compound of formula (I)



(I)

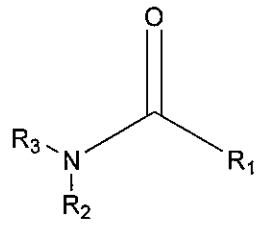
wherein

R_1 together with the carbonyl group to which it is attached is a residue of a carboxylic acid, and NR_2R_3 , in which R_3 is H or together with R_2 and the N-atom to which they are attached, a 5-membered ring, is a residue of an amino acid, and is in the form of a proteinogenic amino acid, ornithine, gamma–aminobutyric acid or beta alanine, or a 1-amino cycloalkyl carboxylic acid; in a solvent selected from water-miscible alcohols wherein the extraction solvent is propylene glycol.

4. A method or stock solution according to any one of the preceding claims, wherein the

compound of formula (I) is present in an amount of up to 15 % by weight.

5. A spray dried powder comprising a compound according to formula (I)



(I)

wherein

R_1 together with the carbonyl group to which it is attached is a residue of a carboxylic acid, and NR_2R_3 , in which R_3 is H or together with R_2 and the N-atom to which they are attached, a 5-membered ring, is a residue of an amino acid, and is in the form of a proteinogenic amino acid, ornithine, gamma–aminobutyric acid or beta alanine, or a 1-amino cycloalkyl carboxylic acid and having initially been up to 25% by weight within a stock solution.

6. A spray dried powder according to claim 5, comprising a carrier material selected from a maltodextrin having a dextrose equivalent (DE) of 3 to 25, or gum Arabic.

7. A spray dried powder according to claim 5, wherein the compound of formula (I) is present in an amount of up to 1.5% by weight based on the total weight of the powder.

8. A spray dried powder according to claim 5, wherein the compound of formula (I) is present in an amount of up to 15 % by weight.