CLAIMS

1. A method for producing methionine which comprises the following steps (1) to (4):

(1) a reaction step: a step of hydrolyzing 5-[2-(methylthio)ethyl]imidazolidine-2,4-dione in the presence of an alkali compound to obtain a reaction solution containing an alkali salt of methionine,

(2) a crystallization step: a step of precipitating methionine by introducing carbon dioxide into the reaction solution to obtain a first slurry containing the methionine,

(3) a solid-liquid separation step: a step of allowing the first slurry to flow into a pressurized filter and obtaining the solid methionine and mother liquor from the first slurry, and

(4) a carbon dioxide recovery step: a step of recovering carbon dioxide from the mother liquor,

wherein the mother liquor is transferred to a recovery tank kept at a pressure lower than the pressure in the pressurized filter, the carbon dioxide dissolved in the mother liquor is released as a gas in the recovery tank, and recovered.

2. The method for producing methionine according to claim 1, wherein the solid-liquid separation step comprises a first solid-liquid separation step and a second solid-liquid separation step, and the first solid-liquid separation step is a step of allowing the first slurry to flow into a pressurized filter and obtaining the solid methionine and the mother liquor from the first slurry, and the second solid-liquid separation step is a step of further reducing the liquid content of solid methionine obtained in the first solid-liquid separation step by drying or filter pressing.

3. The method for producing methionine according to claim 2, which comprises a reslurry step of mixing the solid methionine obtained in the first solid-liquid separation step and a reslurry solution to form a second slurry, and the second solid-liquid separation step comprises a step of conducting a solid-liquid separation of the second slurry to obtain solid methionine having a lower liquid content than the solid methionine obtained in the first solid-liquid separation step.

4. The method for producing methionine according to any one of claims 1 to 3, wherein the said pressurized filter is a continuous pressurized filter.