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International Methionine Analogue Association[(1)]

IMAA guideline for declaration of methionine in feeds for swine and poultry produced with hydroxy analogue of methionine or calcium salt of hydroxy analogue of methionine (August 2016)

According to provisions of COMMISSION IMPLEMENTING REGULATION (EU) No. 469/2013, hydroxy analogue of methionine and calcium salt of hydroxy analogue of methionine have to be declared on the labels of feed materials and compound feed under the "Additives" heading with (i) the name of the additive and (ii) the amount of hydroxy analogue of methionine added.

However, the declaration of the amount of methionine under the "Analytical Constituents" heading as measured by usual chemistry may not always provide completely meaningful information on the true value of the compound swine or poultry feed when hydroxy analogue of methionine or calcium salt of hydroxy analogue of methionine are added since the official analytical method for the analysis of methionine cannot quantify hydroxy analogue of methionine.

To address this issue in compliance with the *COPA-COGECA / FEFAC Code of Good Labelling Practice for Compound Feed for Food Producing Animals*, IMAA is recommending to declare, on a voluntary basis and in addition to the amount of methionine declared as analytical constituent (i.e. native methionine + added DL- and/or L-methionine forms), under the "Analytical constituents" heading the "**Total methionine equivalent value**" (abbreviated: Total methionine eq. value) of the compound feed being the sum of native methionine + any of the authorized added forms of DL or L-methionine + methionine equivalent value of added hydroxy analogue of methionine or calcium salt of hydroxy analogue of methionine. The methionine equivalent value of hydroxy analogue of methionine and of calcium salt of hydroxy analogue of methionine shall be based on a **bio-equivalence factor of 100%** as compared to methionine.

The person responsible for labelling can substantiate this 100% bio-equivalence factor with the substantiation dossier that is provided by IMAA.

[(1)] IMAA is a non-profit Association, set up in 2012 by Methionine Analogue producers, for the promotion of the reputation, utilization and dissemination of HMTBA (Hydroxy Analogue of Methionine).

Examples:

Declaration of methionine in a compound feed supplemented by 2,000 mg/kg of the feed additive "Hydroxy analogue of methionine (3c307)" (88% pure).

Methionine equivalent value of the added amount of the feed additive "Hydroxy analogue of methionine": 2,000 mg/kg * 88% * 100% = 1,760 mg/kg methionine equivalent = 0.18% methionine equivalent value

ANALYTICAL CONSTITUENTS			
Crude Protein	19%	**Methionine**	**0.35%**[2)]
Crude Fibre	4.0%	**Total methionine equivalent value**	**0.53%**[1)]
Crude Oils and fats	5.0%	Calcium	0.70%
Crude Ash	5.5%	Sodium	0.17%
Lysine	1.4%	Phosphorus	0.50%

1) 0.35% methionine + 0.18% methionine equivalent value of hydroxy analogue of methionine

2) If only methionine is listed, the amount of methionine declared as analytical constituent shall include the amount of methionine provided by feed materials and by any forms of DL and/or L methionine authorised as feed additive, as relevant. In this case the total methionine equivalent value does not exist.

ADDITIVES per kg

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Amino acids, their salts and analogues: Hydroxy analogue of methionine (3c307), 1.760 mg hydroxy analogue of methionine

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Declaration of methionine in a compound feed supplemented by 2,000 mg/kg of the feed additive "Calcium salt of hydroxy analogue of methionine (3c308)" (84% hydroxy analogue of methionine).

Methionine equivalent value of the added amount of the feed additive "Calcium salt of hydroxy analogue of methionine": 2,000 mg/kg * 84% * 100% = 1,680 mg/kg methionine equivalent = 0.17% methionine equivalent value

ANALYTICAL CONSTITUENTS			
Crude Protein	19%	**Methionine**	**0.35%**
Crude Fibre	4.0%	**Total methionine equivalent value**	**0.52%**[1)]
Crude Oils and fats	5.0%	Calcium	0.70%
Crude Ash	5.5%	Sodium	0.17%
Lysine	1.4%	Phosphorus	0.50%

1) 0.35% methionine + 0.17% methionine equivalent value of calcium salt of hydroxy analogue of methionine

ADDITIVES per kg

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Amino acids, their salts and analogues: Calcium salt of hydroxy analogue of methionine (3c308), 1.680 mg hydroxy analogue of methionine

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