

**COMMISSION DIRECTIVE**  
**of 26 July 1988**  
**amending the Annex to Council Directive 82/471/EEC concerning certain**  
**products used in animal nutrition**

(88/485/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 82/471/EEC of 30 June 1982 concerning certain products used in animal nutrition <sup>(1)</sup>, as last amended by Commission Directive 86/530/EEC <sup>(2)</sup>, and in particular Article 6 thereof,

Whereas Directive 82/471/EEC provides for regular amendment of the content of the Annex thereto as a result of developments in scientific or technical knowledge;

Whereas it is appropriate for reasons of clarity to split up the group of amino acids and their salts according to the different amino acids;

Whereas the study of two new lysine-based products has shown that these products fulfil the requirements of Directive 82/471/EEC; whereas the use of the products in animal nutrition should, therefore, be permitted under certain conditions;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Standing Committee for Feedingstuffs,

HAS ADOPTED THIS DIRECTIVE:

*Article 1*

The Annex to Directive 82/471/EEC is amended as set out in the Annex hereto.

*Article 2*

The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Article 1 not later than 30 June 1989. They shall immediately inform the Commission thereof.

*Article 3*

This Directive is addressed to the Member States.

Done at Brussels, 26 July 1988.

*For the Commission*

Frans ANDRIESEN

*Vice-President*

<sup>(1)</sup> OJ No L 213, 21. 7. 1982, p. 8.

<sup>(2)</sup> OJ No L 312, 7. 11. 1986, p. 39.

Item 3, 'Amino acids and their salts', is replaced by the following:

1 Name of product group	2 Name of product	3 Designation of nutritive principle or identity of micro-organism	4 Culture substrate (specifications if any)	5 Composition characteristics of product	6 Animal species	7 Special provisions
3. Amino acids and their salts						
3.1. Methionine	3.1.1. DL-Methionine, technically pure	$\text{CH}_3(\text{CH}_2)_2\text{-CH}(\text{NH}_2)\text{-COOH}$	—	DL-Methionine: minimum 98 %	All animal species	Declarations to be made on the label or packaging of the product:
	3.1.2. Dihydrated calcium salt of N-hydroxymethyl-DL-methionine, technically pure	$[\text{CH}_3(\text{CH}_2)_2\text{-CH}(\text{NH}\text{-}\text{CH}_2\text{OH})\text{-COO}]_2\text{Ca}\cdot 2\text{H}_2\text{O}$	—	DL-Methionine: minimum 67 % Formaldehyde: maximum 14 % Calcium: minimum 9 %	Ruminants from the beginning of rumination	— the name "DL-methionine", in the case of products 3.1.1, "Dihydrated calcium salt of N-hydroxymethyl-DL-methionine" in the case of product 3.1.2, "Zinc-methionine", in the case of product 3.1.3,
	3.1.3. Methionine-zinc, technically pure	$[\text{CH}_3(\text{CH}_2)_2\text{-CH}(\text{NH}_2)\text{-COO}]_2\text{Zn}$	—	DL-Methionine: minimum 80 % Zn: maximum 18,5 %		— DL-methionine and moisture contents, — animal species or category in the case of products 3.1.2 and 3.1.3,

1 Name of product group	2 Name of product	3 Designation of nutritive principle or identity of micro-organism	4 Culture substrate (specifications if any)	5 Composition characteristics of product	6 Animal species	7 Special provisions
3.2. Lysine	3.2.1. L-Lysine, technically pure 3.2.2. Concentrated liquid L-lysine (base) 3.2.3. L-Lysine-monohydrochloride, technically pure 3.2.4. Concentrated liquid L-lysine-monohydrochloride 3.2.5. L-Lysine-sulphate produced by fermentation with <i>Corynebacterium glutamicum</i>	$\begin{array}{l} \text{NH}_2(\text{CH}_2)_4\text{COOH} \\ \text{CH}(\text{NH}_2)\text{COOH} \\ \text{NH}_2(\text{CH}_2)_4\text{COOH} \\ \text{CH}(\text{NH}_2)\text{COOH} \\ \text{NH}_2(\text{CH}_2)_4\text{COOH.HCl} \\ \text{CH}(\text{NH}_2)\text{COOH.HCl} \\ \text{NH}_2(\text{CH}_2)_4\text{COOH.HCl} \\ \text{CH}(\text{NH}_2)\text{COOH.HCl} \\ [\text{NH}_2(\text{CH}_2)_4\text{COOH}]_2 \cdot \text{H}_2\text{SO}_4 \end{array}$	<p>—</p> <p>Saccharose, molasses, starch products and their hydrolysates</p> <p>—</p> <p>Saccharose, molasses, starch products and their hydrolysates</p> <p>Sugar syrup, molasses, cereals, starch products and their hydrolysates</p>	<p>L-Lysine : minimum 98 %</p> <p>L-Lysine : minimum 60 %</p> <p>L-Lysine : minimum 78 %</p> <p>L-Lysine : minimum 22,4 %</p> <p>L-Lysine : minimum 40 %</p>	<p>All animal species</p>	<p>Declarations to be made on the label or packaging of the product :</p> <p>— the name "L-lysine" in the case of product 3.2.1, "Concentrated liquid L-lysine base" in the case of product 3.2.2, "L-lysine-monohydrochloride" in the case of product 3.2.3, "Concentrated liquid L-lysine monohydrochloride" in the case of product 3.2.4, "L-lysine sulphate and its by-products from fermentation" in the case of product 3.2.5,</p> <p>— L-lysine and moisture contents</p>
3.3. Threonine	3.3.1. L-Threonine, technically pure	$\begin{array}{l} \text{CH}_3\text{-CH(OH)-} \\ \text{CH(NH}_2\text{)-COOH} \end{array}$	<p>—</p>	<p>L-Threonine : minimum 98 %</p>	<p>All animal species</p>	<p>Declarations to be made on the label or packaging of the product :</p> <p>— the name "L-threonine",</p> <p>— L-threonine and moisture contents</p>

1	2	3	4	5	6	7
Name of product group	Name of product	Designation of nutritive principle or identity of micro-organism	Culture substrate (specifications if any)	Composition characteristics of product	Animal species	Special provisions
3.4. Tryptophan	3.4.1. L-Tryptophan, technically pure	$(C_8H_9NH)-CH_2-CH(NH_2)-COOH$	—	L-Tryptophan : minimum 98 %	All animal species	Declarations to be made on the label or packaging of the product : — the name : — "L-tryptophan", — L-tryptophan and moisture contents
	3.4.2. DL-Tryptophan, technically pure	$(C_8H_9NH)-CH_2-CH(NH_2)-COOH$	—	DL-Tryptophan : minimum 98 %	All animal species	Declarations to be made on the label or packaging of the product : — the name : — "DL-tryptophan", — DL-tryptophan and moisture contents