

**The Draft Amendment of Standards for Specification, Scope,  
Application and Limitation of Food Additives**

MOHW Food No.1091302610, 02 12, 2020

**Appendix 1: Standards for Scope, Application and Limitation of Food  
Additives**

08. Nutritional additives

<b>Code</b>	<b>Food Additive Items</b>	<b>Scope and Application Standards</b>	<b>Limitations</b>
08112	Lactoferrin	1. General foods: not more than <u>300</u> mg of lactoferrin for foods labeled with daily dosage. 2. Special dietary foods: as practically needed.	For supplementing purpose.

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**Appendix 2: Standards for Specification of Food Additives**

**08. Nutritional additives**

§ 08112

**Lactoferrin**

<b>Description</b>	Obtained by degreasing, separating and refining the milk. White to pink powder.
<b>Crude protein</b>	Not less than <u>93%</u> (TN×6.38, on the dried basis).
<b>Lactoferrin</b>	Not less than <u>95%</u> on the <u>protein</u> dried basis.
<b>Iron</b>	<u>100-160 mg/kg</u>
<b>Water</b>	Not more than 4.5%.
<b>Solubility</b>	Dissolve 2 g of the sample in 100 mL of water. The solution should be “transparent”.
<b>pH</b>	<u>5.5-6.5 (20°C)</u> (2% soln)
<b>Ash</b>	Not more than 1% ( <u>550°C</u> ).
<b>Heavy metals</b>	<u>Not more than 1 mg/kg.(the total content of Cadmium, Lead, Arsenic, Mercury).</u>
<b>Category</b>	Food Additives Category 8
<b>Uses</b>	Nutritional additives

## 16. Emulsifier

§ 16006

### Diacetyl Tartaric Acid Esters of Mono- and Diglycerides

#### Synonyms

Diacetyltartaric acid esters of mono- and diglycerides; DATEM; Tartaric, acetic and fatty acid esters of glycerol, mixed; Mixed acetic and tartaric acid esters of mono and diglycerides of fatty acids; INS No. 472e.

#### Definition

The product consists of mixed glycerol esters of mono- and diacetyltartaric acid and fatty acids from edible fats and oils. It is made by the interaction of diacetyltartaric anhydride and monoand diglycerides of fatty acids in the presence of acetic acid, or by interaction of acetic anhydride and mono- and diglycerides of fatty acids in the presence of tartaric acid.

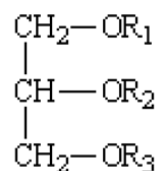
Because of inter- and intramolecular acyl-group exchange, both methods of production lead to the same essential components, the distribution of which depends on the relative proportions of the basic raw materials, on temperature, and on reaction time. The product may contain small amounts of free glycerol, free fatty acids, and free tartaric and acetic acids.

#### C.A.S. numbers

308068-42-0

100085-39-0

#### Structural formula



in which one or two of the R groups is a fatty acid moiety and the other R groups are either:

- diacetylated tartaric acid moiety
- monoacetylated tartaric acid moiety
- tartaric acid moiety

	- <u>acetic acid moiety</u>
	- <u>hydrogen</u>
<b><u>Description</u></b>	<u>Liquid, paste, or wax-like solid</u>
<b><u>Characteristics</u></b>	
<b><u>Identification</u></b>	
<u>Solubility</u>	<u>Dispersible in cold and hot water; soluble in methanol, ethanol, acetone, and ethyl acetate.</u>
<u>1,2-diols</u>	<u>To a solution of 500 mg in 10 ml methanol, add dropwise, lead acetate TS. A white, flocculent, insoluble precipitate is formed.</u>
<u>Fatty acids</u>	<u>Passes test</u>
<u>Acetic acid</u>	<u>Passes test</u>
<u>Tartaric acid</u>	<u>Passes test</u>
<u>Glycerol</u>	<u>Passes test</u>
<b><u>Purity</u></b>	
<u>Acids</u>	<u>Acids other than acetic, tartaric and fatty acids, shall not be detectable.</u>
<u>Sulfated ash</u>	<u>Not more than 0.5% (determined at 800±25°C)</u>
<u>Acid value</u>	<u>40-130</u>
<u>Total acetic acid</u>	<u>8%-32% after hydrolysis</u>
<u>Total tartaric acid</u>	<u>10%-40% after saponification</u>
<u>Total glycerol</u>	<u>11%-28% after saponification</u>
<u>Free glycerol</u>	<u>Not more than 2.0%</u>
<u>Lead</u>	<u>Not more than 2 mg/kg</u>
<b>Category</b>	Food Additives Category 8
<b>Uses</b>	Nutritional additives