

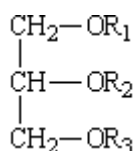
LACTIC and FATTY ACID ESTERS of GLYCEROL

Prepared at the 17th JECFA (1973), published in FNP 4 (1978) and in FNP 52 (1992). Metals and arsenic specifications revised at the 55th JECFA (2000). An ADI not limited' was established at the 17th JECFA (1973)

SYNONYMS Lactic acid esters of mono- and diglycerides; lactoglycerides; INS No. 472b

DEFINITION Mixed glycerol esters of lactic acid and fatty acids of food fats
The article of commerce may be further specified as to monoglyceride content, total lactic acid, acid value, saponification value, free fatty acid content, solidification point of the free fatty acids, iodine value, free glycerol content and water content.

Structural formula



where R₁, R₂ and R₃ each may be a fatty acid moiety, a lactic acid moiety, or hydrogen (approximate composition)

DESCRIPTION Waxy solids of variable consistency and conforms to the following specifications

FUNCTIONAL USES Emulsifier

CHARACTERISTICS

IDENTIFICATION

Solubility (Vol. 4) Insoluble in cold water but dispersible in hot water

Tests for fatty acids (Vol. 4) Passes tests

Test for lactic acid (Vol. 4) Passes tests

Test for glycerol (Vol. 4) Passes tests

PURITY

Acids Acids other than lactic and fatty acids shall not be detectable

Lead (Vol. 4) Not more than 2 mg/kg
Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in Volume 4, "Instrumental Methods."