

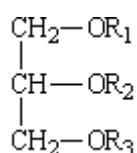
ACETIC and FATTY ACID ESTERS of GLYCEROL

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

SYNONYMS Acetic acid esters of mono- and diglycerides, acetoglycerides, acetylated mono- and diglycerides, INS No.472a

DEFINITION Mixed glycerol esters of acetic acid and fatty acids of food fats. Contains mono- and diesters of fatty acids with glycerol which is itself partially acetylated; may also contain free glycerol and free fatty acids.

Structural formula



where R₁, R₂ and R₃ each may be a fatty acid moiety, - COCH₃ or H

DESCRIPTION From liquid to solid in consistency; white to pale yellow, may have the odour of acetic acid

The article of commerce may be further specified as the saponification value, acid value, free fatty acid content, solidification point of the free fatty acids, Reichert-Meissl value, iodine value and free glycerol content.

FUNCTIONAL USES Emulsifier

CHARACTERISTICS

IDENTIFICATION

Solubility (Vol. 4) Insoluble in water; soluble in ethanol

Test for fatty acid (Vol. 4) Passes test

Test for acetic acid (Vol. 4) Passes test

Test for glycerol (Vol. 4) Passes test

PURITY

Acids Acids other than acetic 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."