

ANNEX I

E 270 LACTIC ACID

Definition	
Chemical name	Lactic acid 2-Hydroxypropionic acid 1-Hydroxyethane-1-carboxylic acid
Einecs	200-018-0
Chemical formula	C ₃ H ₆ O ₃
Molecular weight	90,08
Assay	Content not less than 76 % and not more than 84 %
Description	Colourless or yellowish, nearly odourless, syrupy liquid with an acid taste, consisting of a mixture of lactic acid (C ₃ H ₆ O ₃) and lactic acid lactate (C ₆ H ₁₀ O ₅). It is obtained by the lactic fermentation of sugars or is prepared synthetically
<i>Note:</i> Lactic acid is hygroscopic and when concentrated by boiling, it condenses to form lactic acid lactate, which on dilution and heating hydrolyzes to lactic acid	
Identification	
A. Positive test for lactate	
Purity	
Sulphated ash	Not more than 0,1 %
Chloride	Not more than 0,2 %
Sulphate	Not more than 0,25 %
Iron	Not more than 10 mg/kg
Arsenic	Not more than 3 mg/kg
Lead	Not more than 5 mg/kg
Mercury	Not more than 1 mg/kg
Heavy metals (as Pb)	Not more than 10 mg/kg
<i>Note:</i> This specification refers to a 80 % aqueous solution; for weaker aqueous solutions, calculate values corresponding to their lactic acid content	