

**PURAC<sup>®</sup> HiPure 90**

<b>Description</b>	PURAC HiPure is the natural L-Lactic acid, which is produced by fermentation from sugar. It has a mild acid character and is used in many applications in pharmaceutical, cosmetic and chemical industries. PURAC's primary functions are pH-regulation, metal sequestration, chiral intermediate and as a natural body constituent in cosmetic and pharmaceutical products.	
<b>Specification</b>	Product	L-lactic acid
<b>Assay</b>	Assay Stereochemical purity	89.5-90.5 % (w/w) min. 95 % (S)-enantiomer)
<b>Visual sensory characteristics</b>	Color fresh Color after heating Description of flavor  Flavor Odor Form	max. 20 Apha max. 20 Apha mild, characteristic lactic acid flavor passes test passes test syrupy liquid
<b>Identification</b>	Positive for lactate Relative density 20 °C	passes test 1.20-1.22 g/ml
<b>Purity</b>	Sulfated ash / residue on ignition Calcium Chloride Sulphate Heavy metals Iron Lead Mercury Cyanide Citric, oxalic, phosphoric, tartaric acid Reducing sugars Sugars and other reducing substances Readily carbonizable substances Volatile fatty acids Methanol Ether insolubles	max. 0.01 % max. 10 ppm max. 10 ppm max. 10 ppm max. 5 ppm max. 5 ppm max. 0.5 ppm max. 1 mg/kg <sup>1</sup> max. 5 mg/kg <sup>2</sup> passes test passes test USP passes test passes test USP passes test max. 50 ppm passes test EP
<b>Physical-chemical-properties</b>	Molecular formula Molecular weight Chemical name	CH <sub>3</sub> CHOHCOOH 90 2-hydroxypropionic acid

## PURAC<sup>®</sup> HiPure 90

<b>Registration</b>	CAS number	79-33-4 (general 50-21-5)
	EEC Additive number	E 270
	GRAS status	21CFR184.1061
	Complies with	FCC, JSFA, USP, 231/2012/EC
	Complies with (except for assay)	EP (if spec. gravity > 1.21)
	ECOCERT	natural origin 100 %

<sup>1)</sup>based on a 80 %(w/w) solution of lactic acid in water

<sup>2)</sup>based on the dry substance