**PURAC® HS 88**

**Description**
PURAC HS is the natural L-Lactic acid, which is produced by fermentation from sugar. It has a mild acid taste and is widely used in food, cosmetic and chemical industries. PURAC#s main functions are preservation, pH-regulation, flavoring, humectancy, sequestration and as natural body constituent in cosmetic products.

**Specification**
<table>
<thead>
<tr>
<th>Product name</th>
<th>L-Lactic Acid Heatstable 88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>syrupy liquid</td>
</tr>
<tr>
<td>Assay</td>
<td>88.0-89.0 % (w/w)</td>
</tr>
<tr>
<td>Labeled concentration</td>
<td>min. 88.0 % (w/w)</td>
</tr>
<tr>
<td>L(+) content (S)</td>
<td>min. 97 %</td>
</tr>
</tbody>
</table>

**Visual sensory characteristics**
- Clarity of solution: clear
- Color after heating: max. 50 Apha
- Odor: mild, typical lactic acid
- Taste: mild acid

**Identification**
- Solubility: soluble in water and ethanol
- Positive test for acid: 1 in 10 in water, litmus paper passes test
- Positive for lactate: passes test

**Purity**
- Sulfated ash / residue on ignition: max. 0.05 % (w/w)
- Chloride: max. 10 mg/kg
- Sulphate: max. 10 mg/kg
- Arsenic: max. 1 mg/kg
- Heavy metals: max. 5 mg/kg
- Iron: max. 5 mg/kg
- Lead: max. 0.5 mg/kg
- Mercury: max. 1 mg/kg
- Cyanide: max. 1 mg/kg
- Citric, oxalic, phosphoric, tartaric acid: passes test
- Sugars and other reducing substances: passes test
- Readily carbonizable substances: passes test
- Volatile fatty acids: passes test
- Methanol: max. 0.05 % (w/w)
- Ether insolubles: passes test

**Physical-chemical properties**
- Molecular formula: CH$_3$CHOHCOOH
- Molecular weight: 90
- Chemical name: 2-hydroxypropionic acid

**Registration**
- CAS number: 79-33-4 (general 50-21-5)
- EEC Additive number: E 270
- GRAS status: 21CFR184.1061
- Complies with: FCC, JSFA, JECFA, USP, 231/2012/EC

**Additional information**
passes test: see codicession of: Complies with latest version of: JECFA: Joint FAO/WHO Expert Committee on Food Additives; Codex Alimentarius
PURAC® HS 88

FCC: Food Chemicals Codex
USP: United States Pharmacopeia
JSFA: Japan's Specifications and Standards for Food Additives
This product is heatstable.

1) passes test: see codices