**PLASTICIZER E**
**EPOXIDIZED SOYABEAN OIL**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density 20 °C g/cm³</td>
<td>0.990 – 1.010</td>
</tr>
<tr>
<td>Viscosity 20 °C p</td>
<td>4.5 – 5.5</td>
</tr>
<tr>
<td>Acid value mg KOH/g</td>
<td>≤ 0.75</td>
</tr>
<tr>
<td>Refractive index 25 °C</td>
<td>1.4720 – 1.4730</td>
</tr>
<tr>
<td>Iodine value</td>
<td>≤ 3</td>
</tr>
<tr>
<td>Gardner colour</td>
<td>≤ 2</td>
</tr>
<tr>
<td>Flash point °C</td>
<td>231</td>
</tr>
<tr>
<td>Pour point °C</td>
<td>&lt; 12</td>
</tr>
<tr>
<td>Oxyrane Oxygen %</td>
<td>6.6 – 8.0</td>
</tr>
<tr>
<td>Saponification index</td>
<td>182 – 184</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
</tbody>
</table>

Medium molecular weight 959
CAS number 8013-07-8
EINECS number 232-391-0
CN code 1518009180

**Composition fatty acids (%)**

- Stearic acid: 3 – 5
- C: 3 Linolenic acid: 6 – 10
- Palmitic acid: 8 – 12
- C: 1 Oleic acid: 20 – 26
- C: 2 Linoleic acid: 48 – 57

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**Description**

**Plasticizer E** is a UVCB substance (vegetal origin) of variable composition, obtained by epoxidation of fatty acids triglycerides of Soybean.

**Performance**

**Plasticizer E** acts as secondary plasticizer, plasticises and stabilizes since both, compositions of PVC and others thermoplastic chlorides.

**Properties**

**Plasticizer E** has the following properties: non-volatility and good resistance to extraction by watery agents and hydrocarbons.

**Plasticizer E** can be blended with others primary plasticizers or polymeric and stabilizers producing a synergetic effect to optimize cost-performance, in a wide temperature range.

**Plasticizer E** gives stability to the sunlight and heat.

**Plasticizer E** operates retaining acid groups. For this reason, it makes a barrier effect stopping acid hydrolysis, giving stability to sunlight and heat.

**Plasticizer E** is a good internal lubricant, because it improves fluidity of the blend, in the calendering and extrusion process.

**Legislation**

**Plasticizer E** Can be in contact with food, in accordance with Regulation 10/2011 with MCA number 532. It has a LME = 60/30 mg/kg, for closures with sealing gaskets. It fulfils FDA n°172.723 (food additives) 175.105 (adhesives), 175.300 (resinous and polymeric coatings), 178.3910 (surface lubricants) and 181.27 (plasticizer).

INCI Name: epoxidized Soybean oil

**REACH**

Register number 01-2119471314-43-0015

**Application**

**Plasticizer E** (epoxidized Soybean oil) is used in a lot of applications, plasticises and stabilizes since both compositions of PVC and others thermoplastic chlorides and plastic transformer industries.

**Dosage**

Flexible PVC: between 2 - 6 % on resins.
Rigid PVC: about 2 %.
In hydrolysable products, 0.3% of epoxy oxygen over the total weight of the formula.

**Packaging**

IBC of 1.000 kg., and drums of 200 kg