**Vikoflex® 7190**

**Epoxidized Linseed Oil**

**PRODUCT DESCRIPTION**

Vikoflex® 7190 is a specialized premium-quality epoxidized linseed oil with superior performance properties distinguishing it from all currently available epoxidized linseed oils. Its high compatibility and superior heat and light stability enable Vikoflex® 7190 epoxidized linseed oil to function as a primary, polymeric type, plasticizer-stabilizer.

Vikoflex® 7190 epoxidized linseed oil is recommended for food contact packaging and medical applications where very little or no metallic stabilizer is used. Low odor properties also contribute to the high acceptance of Vikoflex® 7190 epoxidized linseed oil in these critical areas.

Vikoflex® 7190 epoxidized linseed oil is recommended for PVC homopolymer and copolymer plasticization and stabilization in a host of rigid, semirigid, flexible extruded, calendered, and molded compounds.

**TYPICAL PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxirane Oxygen</td>
<td>9.0% Min</td>
</tr>
<tr>
<td>Acid Value</td>
<td>0.5 Max</td>
</tr>
<tr>
<td>Specific Gravity 25/25°C</td>
<td>1.03</td>
</tr>
<tr>
<td>Refractive Index @ 25°C</td>
<td>1.4765</td>
</tr>
<tr>
<td>Color - APHA</td>
<td>225 Max</td>
</tr>
<tr>
<td>Fire Point</td>
<td>343°C</td>
</tr>
<tr>
<td>Pounds Per Gallon @ 25°C</td>
<td>8.58</td>
</tr>
<tr>
<td>Odor</td>
<td>Very Low</td>
</tr>
<tr>
<td>Viscosity@ 25°C</td>
<td>650 cps Min</td>
</tr>
<tr>
<td>Iodine</td>
<td>3.5 Max</td>
</tr>
</tbody>
</table>

**PRODUCT BENEFITS**

1. Superior Heat & Light Stability
2. Styrene Craze Resistance
3. Low Volatility
4. Light Color
5. Low Viscosity
6. Low Odor
7. Less Clouding at Low Temperatures

The remarkable heat stability of Vikoflex® 7190 epoxidized linseed oil gives the vinyl compounder a greater margin of safety and in many applications offers the economic advantage of reducing metallic stabilizer levels. Applications specifying low or nonexistent levels of metallic stabilizer clearly establish the superiority of Vikoflex® 7190 epoxidized linseed oil over all competitive products.

Brabender curves show a lower torque requirement for Vikoflex® 7190 epoxidized linseed oil as compared to other epoxidized linseed oils. Conventional oven heat stability tests of non-stabilized compounds show the following:

<table>
<thead>
<tr>
<th>Heat Stability</th>
<th>Vikoflex® 7190</th>
<th>Comp A</th>
<th>Comp B</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Min</td>
<td>Clear</td>
<td>Light Yellow</td>
<td>Clear</td>
</tr>
<tr>
<td>18 Min</td>
<td>Clear</td>
<td>Dark Yellow</td>
<td>Light Yellow</td>
</tr>
<tr>
<td>24 Min</td>
<td>Clear</td>
<td>Very Dark Yellow</td>
<td>Medium Yellow</td>
</tr>
<tr>
<td>30 Min</td>
<td>Clear</td>
<td>Very Dark Yellow</td>
<td>Medium Yellow</td>
</tr>
<tr>
<td>36 Min</td>
<td>Clear</td>
<td>Brown</td>
<td>Yellow</td>
</tr>
<tr>
<td>42 Min</td>
<td>Clear</td>
<td>Brown</td>
<td>Dark Yellow</td>
</tr>
<tr>
<td>48 Min</td>
<td>Clear</td>
<td>Dark Brown</td>
<td>Very Dark Yellow</td>
</tr>
</tbody>
</table>

Conditions: 375°F oven temperature 10% of total plasticizer as epoxidized linseed oil.

**SUGGESTIONS FOR USE**

- Intravenous Tubing
- Pipe
- Cap Liners & Seals
- Blood Bags
- Molded Bottles
- Construction Materials
- Food Wrap Film
- Meat Trays
- Upholstery

**PACKAGING**

Vikoflex® 7190 epoxidized linseed oil is available in 55 gallon (450 lb net), 40,000 lb bulk tanktrucks and 160,000 lb min tankcars.
ENVIRONNMENTAL AND SAFETY INFORMATION

BEFORE HANDLING THIS MATERIAL, READ AND UNDERSTAND THE MSDS (MATERIAL SAFETY DATA SHEET) / SDS (SAFETY DATA SHEET) FOR ADDITIONAL INFORMATION ON SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION.

The MSDS/SDS are available on our Website www.arkema.com or upon request at our Customer Service Department at +1 (800) 331 7654 in the US, and at +33 (0) 1 4900 8837 in Europe. Arkema believes strongly in Responsible Care® as a public commitment.

MORE TECHNICAL INFORMATION AVAILABLE

Ask your Arkema account manager for further information on high quality Arkema additives for use in PVC, PC, PBT, ABS, PLA and other polymer systems. Arkema produces a full line of impact modifiers, processing aids and epoxidized vegetable oils. In addition, Arkema’s Technical Service staff is also available to assist compounders and processors with formulation and processing advice.

Durastrength® Impact Modifiers
Durastrength® acrylic impact modifiers deliver outstanding impact characteristics for outdoor durable applications in PVC and Engineering Resins.

Plastistrength® Process Aids
Plastistrength® process aids offer producers a complete line of melt strengtheners and metal release agents for PVC and Engineering Resins. Plastistrength® process aids can improve fusion, surging, and aesthetics.

Clearstrength® Impact Modifiers
Clearstrength® MBS impact modifiers are designed for extreme impact or impact/clarity combination in PVC and Engineering Resins.

Biostrength® Additives
The Biostrength® product line of impact modifiers, melt strengtheners and metal release agents are designed to improve properties and enhance processability of polyactic acid (PLA) and other biopolymers compounds.

Vikoflex® Epoxy Plasticizers
The Vikoflex® line of epoxy plasticizers is derived from renewable resources, like epoxidized linseed oil, soybean and tall oil fatty acid esters for applications such as PVC plasticization, acid and mercaptan scavenging, specialty coatings, adhesives & urethanes, reactive diluents, PU flexible foam and intermediates for surfactants and lube & fuel additives.

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