**FUNCTIONAL V-584**
**TACKIFIER for Fatty Oil Based Lubricants:**
LuSC Listed, VGP Compliant and Food Grade

**APPLICATION:**
FUNCTIONAL V-584 is an additive that confers a tack or stringiness to lubricants made from bio-based fatty oils. FUNCTIONAL V-584 is registered with NSF (category HX-1, HX-2) – an additive for lubricants used where incidental food contact may occur. It is principally used to provide adherence in chain oils in environmentally sensitive or food-processing locations. It will also inhibit stray mists and to provide drip resistance.

**COMPOSITION:**
The active ingredient in FUNCTIONAL V-584 is a bio-based polymer that provides tackiness and thickening. The diluent oil in FUNCTIONAL V-584 is a biodegradable vegetable oil.

**Typical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Lbs per Gallon</td>
<td>7.75</td>
</tr>
<tr>
<td>Flash Point</td>
<td>150°C (300°F)</td>
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<tr>
<td>Kinematic Viscosity</td>
<td>2000 - 3000 cSt at 40°C</td>
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<tr>
<td>Thickening efficiency</td>
<td>55 cSt @ 40°C (10% in canola oil)</td>
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<tr>
<td>Color</td>
<td>Hazy yellow or orange</td>
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**TREATMENT LEVEL:**
A treatment level as low as 1% will provide tackiness in a vegetable oil. About 5% will bring a vegetable oil to ISO 46 and 10% to ISO 68. The slight residual haze in these higher-viscosity blends does not affect performance. 0.2% to 1.0% of FUNCTIONAL PD-551 can inhibit the freezing of the base oil, extending the useful temperature range of the lubricant. Minimization of hydrocarbon aerosol escape from mist-lubricated and pneumatic equipment requires up to about 1%. Since there are no standardized test methods for tackiness or stray-mist inhibition, the treatment level is best determined by experimentation by the user.

**HANDLING:**
While warming FUNCTIONAL V-584 to about 50°C (120°F) may facilitate pumping and handling, extended storage of this or any other vegetable oil-derived product at elevated temperatures is not recommended. Safe handling precautions are the same as those to be taken with vegetable oils; see the current Safety Data Sheet.

FUNCTIONAL V-584 has a shelf life of 6 months and may separate slightly upon standing. To maintain integrity of the product, mix well before use. Avoid high temperature and mechanical shearing during handling and blending to minimize possible loss in tackiness.

**NSF**
Nonfood Compounds
Program Listed
Category Codes: HX-1and HX-2
Registration No.120913

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.

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