

### FUNCTIONAL PD-564

#### Cold Flow Improver for Estolides and Saturated Esters

#### APPLICATION:

**FUNCTIONAL PD-564** is a liquid-form pour point depressant based on functionalized polymethacrylate chemistry. **FUNCTIONAL PD-564** has been specifically formulated to provide improved cold flow to saturated estolide and ester base oils.

#### COMPOSITION:

**FUNCTIONAL PD-564** is a functionalized polyalkylmethacrylate blend in highly refined mineral oil.

| Typical Properties            |                   |
|-------------------------------|-------------------|
| Lbs per Gallon (ASTM D1475)   | 7.7               |
| Specific Gravity              | 0.92              |
| Typical Viscosity (ASTM D445) | 1000 cSt at 100°C |
| Flash Point (ASTM D92)        | 150°C             |
| Color (ASTM D1500)            | ≤ 3.0             |

#### TREATMENT LEVEL:

Typical treatment level for methacrylate-based PPD ranges from 0.1-3%.

#### FUNCTIONAL PD-564 Pour Point Depression in Estolides

| Wt% PD-564 | BT4  | BT22 | BT75 |
|------------|------|------|------|
| 0.0%       | -21C | -21C | -18C |
| 0.6%       | -51C | -27C | -24C |
| 1.0%       | -51C | -27C | -24C |

#### HANDLING:

**FUNCTIONAL PD-564** should be warmed to about 50°C (120°F) to facilitate pumping and handling. The base oil should be heated to 60-80°C (140-180°F) during blending to allow for good mixing. Mixing time will vary with equipment but is typically at least one hour. Safe handling precautions are the same as those to be taken with base oil; see the current Safety Data Sheet.