## Technical Data Sheet

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 $100^{\circ} \mathrm{C}$ |
| Thickening Efficiency (10\% in ISO 32) | 16.9 cSt at $100^{\circ} \mathrm{C}$ |
| PSSI (5\% in 150N, ASTM D6278) | $40 \%$ |
| Flash Point (ASTM D92) | $150^{\circ} \mathrm{C}$ |
| Color (ASTM D1500) | $\leq 3.0$ |

## 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 |
| $0.0 \%$ | -21 C | -21 C | -18 C |
| $0.6 \%$ | -51 C | -27 C | -24 C |
| $1.0 \%$ | -51 C | -27 C | -24 C |

## HANDLING:

FUNCTIONAL PD-564 should be warmed to about $50^{\circ} \mathrm{C}\left(120^{\circ} \mathrm{F}\right)$ to facilitate pumping and handling. The base oil should be heated to $60-80^{\circ} \mathrm{C}\left(140-180^{\circ} \mathrm{F}\right)$ 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.

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[^0]:    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.

