



## Pure Synthetic Gear Oils

**DS-4617-150-F, DS-4617-220-F, DS-4617-320-F, DS-4617-460-F**

### Product Description

DS-4617-F series products are custom formulated polyalphaolefin (PAO) synthetic hydrocarbon fluids giving improved lubrication at high and low temperatures, reduced volatility, and compatibility with mineral oils and equipment designed for use with mineral oils. These products are intended for enclosed gear sets operating under high load conditions and at severe temperatures. They can be used at temperatures as low as -35°F (-37°C) and as high as 250°F (121°C).

DS-4617-F series products are authorized by the USDA for use in federally inspected meat and poultry plants (H-1). They comply with FDA 21CFR 178.3570 for incidental contact with food.

### Typical Applications

- Enclosed gear sets at extreme temperatures.
- Food grade chain lubrication.
- Food grade rail lubrication (grades 320-F and 460-F only).

### Typical Properties\*

Viscosity	150-F	220-F	320-F	460-F
@ 40°C cSt per ASTM D445	147.7	217.4	320.0	392.0
@ 100°C cSt	18.2	24.4	33.0	38.8
@ 100°F SUS	763	1128	1668	2045
@ 210°F SUS	92.4	119.8	160.0	186.8
Viscosity Index, per ASTM D2270	138	141	145	147
Flash Point, C.O.C., °F (°C) per ASTM D92	530 (277)	535 (279)	540 (282)	545 (285)
Fire Point, C.O.C., °F (°C) per ASTM D92	580 (304)	585 (307)	592 (311)	595 (313)
Pour Point, °F (°C) per ASTM D97	-49 (-45)	-46 (-43)	-38 (-39)	-35 (-37)
Density lb./gal. 60°F (15°C)	7.04	7.05	7.08	7.10
Specific Gravity @ 72°F per ASTM D1298	0.845	0.846	0.850	0.852

\*These values are not intended for use in preparing specifications.

The information and specifications presented in this product brochure are believed to be accurate, but are supplied for information purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, with respect to the product. Although Flowserve Corporation can provide general application guidelines, it cannot provide specific information for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper selection, installation, operation and maintenance of Flowserve products. Because Flowserve Corporation is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice.

#### Primary Worldwide Flow Solutions Division Locations

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