



# TECHNICAL DATA SHEET

## MEDALLION™ FM GEAR OILS

*NSF Registered for H-1/Kosher Approved*

Medallion™ Food Machinery Gear Oils are blended using a new generation base oil called Excelsior™.

Most base oils used in industrial lubricants are yellow or amber in color. This "discoloration" is caused by a variety of impurities including traces of sulfur, nitrogen, and inferior aromatic oils. Nitrogen promotes oxidation and deposit formation. Aromatics have poor oxidation stability. Excelsior™ base oils are colorless and free of these materials. Excelsior™ oil is ideal for use in applications involving food machinery.

In laboratory tests, Whitmore's Excelsior™ base oil shows a major reduction in evaporation loss. Oxidation stability exceeds that of convention base oils by 60-100%. These performance improvements translate into reduced carbon and varnish deposits. The end result is longer oil and component life.

Medallion™ Food Machinery Gear Oils also contain effective antiwear additives to protect metal surfaces and reduce downtime due to component failure.

Medallion™ Food Machinery Gear Oils are NSF Registered for H-1 authorized and can be used in food plants where incidental contact with edible products may occur.

Medallion™ FM Gear Oils are produced under the supervision of VA'AD HAKASHRUS of Dallas, Inc. doing business as Dallas Kosher and is considered Kosher-pareve for year-round use including Passover.

Contains an NSF-approved preservative that limits the growth of bacteria.

### BENEFITS:

- H-1 RATED - for use in food processing facilities where incidental contact may occur.
- EXCELLENT DEMULSIBILITY - separates readily from water.
- REDUCES WEAR - protects against scoring, scuffing and galling to increase gear and bearing life.
- EXTENDED OIL LIFE - free of impurities including traces of sulfur, nitrogen, and inferior aromatic oils.
- IMPROVED ADHESIVENESS - insures a coating on the gears at start-up.

### APPLICATIONS:

In addition to parallel-shaft gearboxes, Medallion™ Food Machinery Gear Oils are appropriate for moderately loaded worm gear drives, oiled bearings, and couplings. For ISO 220 viscosity grade use 80W-90. For ISO 320 or 460 choose 85W-140.

ASTM #		TYPICAL CHARACTERISTICS			
D-445	<b>Viscosity Grade</b>	80W-90	85W-140	680	1,000
	<b>NSF Registration</b>	H-1	H-1	H-1	H-1
	<b>Kinematic Viscosity</b>				
	cSt @ 40°C	186.0	374.0	661.0	951.0
	cSt @ 100°C	17.00	31.34	40.00	52.00
D-2270	<b>Viscosity Index</b>	95	119	101	102
D-97	<b>Pour Point, °F (°C)</b>	0 (-18)	5 (-15)	10 (-12)	15 (-9)
Gardner Method	<b>Density, lb/gal @ 60°F (15.5°C)</b>	7.23	7.24	7.29	7.31
	<b>Specific Gravity, g/cc @ 60°F (15.5°C)</b>	0.868	0.869	0.875	0.878
D-92	<b>Flash Point, °F (°C) Cleveland Open Cup</b>	401 (205)	401 (205)	401 (205)	401 (205)
D-4172	<b>Four Ball Wear, Scar Width, mm @ 40 kgf</b>	0.40	0.40	0.30	0.30
	<b>Color</b>	Water White	Water White	Water White to Faint Yellow	Water White to Faint Yellow

*The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.*

### PACKAGING

Drums	Pails
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### THE WHITMORE MANUFACTURING COMPANY

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