



TECHNICAL DATA SHEET

GearMate® 1000 ICT MULTISERVICE OPEN GEAR LUBRICANT

GearMate® 1000 ICT is formulated for use on open gears and other severe applications on draglines and mining shovels. It is also highly recommended for the open gears of kilns and ball mills, including the most severely loaded. Whitmore introduced the "ICT" (improved coating technology) version of GearMate® 1000 in order to meet the demand for an open gear lubricant that deposits a darker, non-transparent coating on metal, and also meets the Caterpillar (formerly Bucyrus International) specification SD 4713. The dense black coating lets the operator know that the lubricant is in place at the right quantity.

Whitmore's blend of solid and oil-soluble anti-wear additives provides superior load carrying ability and high performance wear resistance in an environmentally safe package.

Whitmore's GearMate® 1000 ICT has a thickener structure that inherently resists emulsification with water and has excellent mechanical and thermal stability. The low temperature capabilities allow the lubricant film to maintain its adhesive characteristics and durable protection under the most demanding conditions.

All grades meet the requirements of Caterpillar specification SD 4713. The "Super Heavy" grade meets the requirements for use on Caterpillar Shovel Hoist Drum Gears (specification SD 4713 revision June 2011).

BENEFITS:

- **TCLP-SAFE** - passes the EPA Toxicity Characteristic Leaching Procedure. This means that the product is free of heavy metals and ozone-depleting solvents.
- **WILL NOT EMULSIFY IN WATER** - ideal for applications and components exposed to rain, ice, and snow.
- **EXTREME LOAD-CARRYING ABILITY** - protects during shock loading against scuffing and seizure.
- **REDUCED INVENTORY** – in many climates a single grade can be used year-round.

APPLICATIONS:

Whitmore's GearMate® 1000 ICT is recommended for a variety of applications on mining draglines and shovels including open gears, sticks, circle rails and rollers, bushings and large, heavily loaded bearings.

GearMate® 1000 ICT is also highly suited for use on open gears of kilns, ball mill, and similar rotating equipment. It is especially recommended where high load and inadequate protection has resulted in pitting and scuffing of gears.

ASTM #		TYPICAL CHARACTERISTICS				
		Arctic	Light	Heavy	Extra Heavy	Super Heavy
	NLGI Grade	00-000	0-00	0	1	0-1
D-445	Kinematic Viscosity (Base Oil with Polymer) cSt @ 40°C	700	1,900	4,123	3,700	6,500
	cSt @ 100°C	--	--	165	120	254
Gardner Method	Density, lb/gal @ 60°F (15.5°C)	7.50	8.38	8.33	8.55	8.55
	Specific Gravity, g/cc @ 60°F (15.5°C)	0.9010	1.0060	1.0002	1.0300	1.0300
D-92	Flash Point, Cleveland Open Cup Base Oil, °F (°C)	400 (204)	400 (204)	400 (204)	400 (204)	400 (204)
	Finished Product with Solvent, °F (°C)	250 (121)	250 (121)	No Solvent	No Solvent	No Solvent
D-2596	Four Ball EP Weld Point, kg	800	800	800	800	800
D-2266	Four Ball Wear Scar Width, mm	0.7	0.7	0.7	0.7	0.7
D-1743	Rust Test	Pass	Pass	Pass	Pass	Pass
	Thickener Type	Lithium	Lithium	Lithium	Lithium	Lithium
	Usable Temperature Range, °F (°C)	-30 (-34) to 104 (40)	-5 (-21) to 104 (40)	10 (-12) to 250 (121)	30 (-1) to 250 (121)	50 (10) to 250 (121)

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

PACKAGING

Shuttle Tanks	Drums	Kegs	Pails
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THE WHITMORE MANUFACTURING COMPANY

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