



TECHNICAL DATA SHEET

SURTAC[®] 2000 MULTISERVICE LUBRICANT

Whitmore's Surtac[®] 2000 is a "multiservice" lubricant for use on draglines and shovels, and an open gear lubricant for kilns, ball mills, dryers, wind turbines, etc. Surtac[®] 2000 forms a protective coating on metal without the use of asphalt, solvents or lead.

Surtac[®] 2000 has won the confidence of both end users and OEMs. It has a well-established record on some of the most highly loaded and expensive open gear applications.

Surtac[®] 2000 contains graphite and MoS₂ (molybdenum disulfide). With the help of some specialized chemistry these solid lubricants bond with the metal surface. They form a dense gray colored film, which minimizes metal-to-metal contact and wear. Using Surtac[®] 2000, lubricant consumption is reduced by about 50% compared to asphaltic fluids.

Many slow moving bearings and bushings can benefit from the use of Surtac[®] 2000, allowing lubricant inventories to be reduced.

Here are some hints for creating a protective coating with Surtac[®] 2000:

1. Do not contaminate with bearing grease or incompatible open gear lubricants.
2. Typical setting for open gears: Injectors at 50% open, and timed to lubricate every 30 minutes.
3. Avoid over lubrication.

Your Whitmore Distributor can work with you to minimize consumption, with maximum component protection.

Surtac[®] 2000 aerosol: Store aerosol cans at room temperature. Shake well before spraying.

BENEFITS:

- **TCLP-SAFE** - passes EPA Toxicity Characteristic Leaching Procedure. Contains no lead or solvents.
- **LOWERS OPERATING TEMPERATURES** - extends gear life, reduces operating expenses.
- **REDUCES CONSUMPTION** - lowers lubrication costs compared to traditional lubricants of the fluid type.
- **MULTISERVICE LUBRICANT** - may be used on open gears, many bearings, bushings and some enclosed gears. Does not damage seals or packing materials used in pumping systems and injectors.
- **PUMPABILITY** - In many climates, a single grade can be used year-round. Consult Whitmore or Whitmore Distributor in selecting a suitable grade.

APPLICATIONS:

Surtac[®] 2000 series can be used to lubricate open gears including grinding mills, kilns, and rack and pinion systems. It is suitable for many heavily loaded bushings and bearings operating at or below a speed factor of 150,000 DN. Additionally, Surtac[®] 2000 series can be used in some enclosed gear cases where the lubricant is not filtered or circulated by a pump. (Please consult Whitmore's Technical Service Dept. prior to using Surtac[®] 2000 in bearings or enclosed gear cases.) Surtac[®] 2000 series is ideal for exposed parts on mining equipment such as swing racks, house rails and rollers, shovel dipper sticks, wire ropes, and drum laggings. Surtac[®] 2000 grade is suitable for use on sealed pins and bushings of crawler tracks.

ASTM #	Product Grade	TYPICAL CHARACTERISTICS			
		Surtac [®] 2000	Surtac [®] 2000 RD	Surtac [®] 2000 HD	Surtac [®] 2000 XD
	Appearance	Heavy bodied oil	Very fluid grease	Soft grease	Grease
Gardner Method	Density, lb/gal @ 60°F (15.5°C)	8.29	8.30	8.30	8.40
	Specific Gravity, g/cc @ 60°F (15.5°C)	0.995	0.997	0.997	1.009
D-92	Flash Point, °F (°C) Cleveland Open Cup (Base Oils)	>230 (>110)	>230 (>110)	>230 (>110)	>230 (>110)
D-2596	Four Ball EP, Weld Point, kg	620	620	620	620
D-4048 Modified	Copper Strip Corrosion 212°F (100°C) @ 3 hr	1B	1B	1B	1B
OEM Standard	Low Temperature Pumpability Lincoln Ventmeter @ 400 psi, °F (°C)	-30 (-34)	-20 (-29)	15 (-9)	35 (2)

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	Aerosol Cans 12 per case	Cartridges 50 per case	Caulking Tubes 25 per case
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THE WHITMORE MANUFACTURING COMPANY

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Performance Under Pressure Since 1893

LIMITED WARRANTY: The Whitmore Manufacturing Company makes the Limited Express Warranty that at the date of delivery, its goods shall be free from defects in Whitmore's materials and workmanship and shall meet the express written statements of quality, if any, made by Whitmore in connection with the sale of the goods. Other than such Limited Express Warranty, there are no express warranties made with respect to the sale of goods and all implied warranties existing under the law are expressly disclaimed and negated, particularly, Whitmore NEGATES AND DISCLAIMS THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. All other liability, either in contract or tort, including without limitation, strict liability found in Section 402A of the Restatement of Torts or otherwise, is negated and disclaimed. The sole remedy for Whitmore's breach of such Limited Express Warranty shall be a refund of the purchase price of its goods, and Whitmore shall have no responsibility for incidental or consequential damages sustained as a result of the use of the goods, whether sustained to the goods themselves or to other property. Data listed are subject to usual manufacturing variations.