

METATRON™ 75 SILVER STREAK

DESCRIPTION AND APPLICATION:

Metatron™ 75 Silver Streak is a sprayable semi-synthetic, diluent-type heavy duty, extreme pressure lubricant that is recommended for the lubrication of open gears, pins and bushings, dipper sticks, circle rails, and large open chains that are common to the mining, steel mills, railroad, construction, power plant, sugar mill and marine industries.

Metatron™ 75 Silver Streak is also recommended for the lubrication of fifth wheels of over the road trucks.

COMPOSITION AND FILM FORMING PROPERTIES:

Metatron™ 75 Silver Streak is compounded from a blend of select high viscosity index solvent refined severely hydrofinished paraffin base oils and severely hydrofinished polyalphaolefin. These paraffin base oils and PAO synthetic base fluids were selected for their exceptional physical and chemical stability and serviceability over a wide range of temperatures.

These base fluids are further compounded to provide **Metatron™ 75 Silver Streak** with superior adhesive film forming characteristics. These film forming characteristics allow the **Metatron™ 75 Silver Streak** to resist “squeeze out” and cling tenaciously, even to gears that are in vertical orientation.

NON-CHLORINATED SOLVENTS AND TEXTURE:

Metatron™ 75 Silver Streak contains a non-chlorinated volatile solvent that allows the **Metatron™ 75 Silver Streak** to maintain a soft and pliable texture, especially in cold weather over a long period of time. Once **Metatron™ 75 Silver Streak** is applied to, the open gearing the non-chlorinated volatile solvent evaporates leaving behind a flexible, adhesive and high strength wear resistant viscous lubricant film that strongly adheres to the gear teeth. This viscous lubricant film will not harden, chip or flake in cold weather and will not form a hard packed buildup in the roots of the gear teeth.

FORTIFICATION OF ADHESIVE LUBRICANT FILM:

To fortify the adhesive viscous lubricant film of **Metatron™ 75 Silver Streak**, a combination of molybdenum disulfide and various solid lubricants are compounded into the product. The molybdenum disulfide and various solid lubricants contribute to the structure of the lubricant film and also improve the anti-wear and extreme pressure and load carrying capabilities of **Metatron™ 75 Silver Streak** beyond those of conventional open gear lubricants. The load carrying ability of the **Metatron™ 75 Silver Streak** in excess of 500,000 pounds per square inch.

PROTECTIVE LAYER:

The combination of molybdenum disulfide and the various solid lubricants also forms a protective layer between the mating surfaces of the gears. This protective layer provides a cushioning effect between the contacting asperities of the gear teeth that minimizes pitting, spalling and cold welding of the mating gear teeth.

PERFORMANCE ADVANTAGES:

Metatron™ 75 Silver Streak provides the following performance advantages.

1. Formation of an almost indestructible adhesive film that provides a "cushioning" effect even under boundary lubrication conditions and at very low speeds
2. Resistance to film destruction by contaminating oils and greases migrating from nearby mechanisms.
3. Resistance to rain, snow and the process of water washout
4. Resistance to the adhesion of dust and dirt
5. A reduction in contact temperatures
6. Minimization of cold welding at the contacting asperities
7. Minimizes the vibration of "stick slip"
8. Excellent extreme pressure properties to protect the open gearing from excessive wear, premature fatigue, gear scoring, spalling and pitting
9. Strong adhesion to the gear teeth to resist excessive throw-off
10. A reduction in lubricant consumption rate

CAUTION:

Due to the presence of flammable non-chlorinated solvents **Metatron™ 75 Silver Streak** should not be applied in to areas where there is high heat or open flames.

TYPICAL PROPERTIES:

Specific Gravity @ 15.5°C	0.9321
Four Ball E.P. (ASTM D-2596)	
Weld Point, kgs.	620
Load Wear Index, kgs.	105
Four Ball Wear Test (ASTM D-2266)	
Scar diameter, mm.	0.68
Falex Continuous Load (ASTM D-3233)	
Failure Load, kg (lbs)	+2045 (+4500)
FZG (ASTM D-5182 A/88.3/90)	
Failure Stage	+13th
Rust Inhibition Test (ASTM D-1743)	1,1,1
Deleterious Particles (ASTM D-1404)	
# Of Scratches	20
Rating	2
Copper Strip Corrosion Test (ASTM D-4048)	1b
Base Oil Properties	
Viscosity, SUS @ 100°C	2,400 – 3,000
Viscosity, cSt @100°C (ASTM D-445)	514.58 – 643.22
Flash Point °C (°F) (ASTM D-92)	332° (630°)