

999 S & F GEAR OIL

- QUALITY BASE OILS
- ANTI-WEAR ADDITIVES
- ACTS AS A COOLANT
- RESISTS OXIDATION
- RESISTS FOAMING
- PROVIDES PROPER VISCOSITY

This product was specially formulated to meet the stringent requirements for Spicer and Fuller transmissions. Both manufacturers require a high quality lubricant which must perform several functions without coking or sludging up the unit. The transmission is where the horsepower goes to work. The correct transmission is extremely important in the efficient operation of trucks, tractors, and industrial machinery subjected to varying conditions of road and load. This is why so many equipment owners prefer Spicer and Fuller transmissions ---the leaders of the heavy-duty transmission industry. For lubrication Texas Refinery Corp. is the leader of the heavy-duty transmission lubricant industry.

999 S & F GEAR OIL Starts With Quality Base Oils

Texas Refinery Corp.'s starting point for this product is the crude oil. It has to be of low sulphur or sweet type paraffin-based mid-continent quality. Then the base oils are put through a solvent extraction process which removes undesirable characteristics that might lead to sludge, gum, or varnish under heat. The oils then go through another step called hydro-treating which improves the oxidation characteristics of the oil and improves the oil's response to the high quality additives used by Texas Refinery Corp. The oils also go through a dewaxing process to make them suitable for cold temperatures. The finest paraffin-base stocks with a 95 viscosity index are used because they are less susceptible to attack from oxygen and various acids. They allow for greater thermal oxidation stability and can be used over a wide temperature range.



999 S & F GEAR OIL provides cooling as well as positive lubrication for Spicer and Fuller transmissions.

999 S & F GEAR OIL Contains Anti-Wear Additives

999 S & F GEAR OIL contains anti-wear additives which provide a protective film on all moving parts. In operation, transmissions have many heavily-loaded parts such as gear teeth and bearings. A protective film must be provided to prevent metal-to-metal contact between these parts and therefore prevent scoring, scuffing, and seizure. If the protection is not provided, expensive repair and downtime are the end results.

999 S & F GEAR OIL Acts As A Coolant

Transmissions generate heat when in operation --- especially under heavily-loaded conditions. Heat must be kept minimal for proper operation. 999 S & F GEAR OIL acts as a coolant to dissipate heat so maximum efficiency may be maintained. It is formulated to remain stable under extreme conditions.

999 S & F GEAR OIL Resists Oxidation

999 S & F GEAR OIL resists oxidation two ways. First, only the highest quality base stocks are used. Second, oxidation inhibitors are added to provide greater stability at elevated temperatures and prevent corrosion and sludge from forming. No foreign materials such as sediment or water are present.

999 S & F GEAR OIL Resists Foaming

Many transmission lubricants on the market may begin to foam during operation, causing extensive problems. If foam is present, the level of gear oil drops and proper lubrication is not achieved. Remember, foam is mostly air; therefore, if foam is excessive, the oil film is lost resulting in metal-to-metal contact and wear. The metal-to-metal contact also increases heat and the foam helps trap the heat. This causes much higher than normal operating temperatures. The higher operating temperature helps to oxidize the lubricant which can lead to sludge and gum deposits. Fortunately, all this can be avoided by using 999 S & F GEAR OIL because it contains excellent foam inhibitors to resist this serious problem.

999 S & F GEAR OIL Provides Proper Viscosity

999 S & F GEAR OIL was formulated to provide the proper viscosity. It is an SAE 90 gear oil equal to the SAE 50 motor oil classification. Proper viscosity is required for film strength and proper flow to the various transmission components.

SPECIFICATIONS

999 S & F GEAR OIL Product Code #8109

Test Method			
ISO Grade		220	
Gravity, °API	D287	26.0/25.0	
Specific Gravity @ 60° F., Typical		0.8434	
Flash Point, °F., COC, Min.	D92	455	
Fire Point, °F., COC, Typical	D92	530	
Pour Point, °F., Maximum	D97	+10	
Viscosity, SUS @ 100° F., Typical	D446	1065	
Viscosity, SUS @ 210° F.	D446	90/100	
Viscosity Index, Min.		95	
Sulfated Ash, Wt.%, Max.	D874	1.3	
Foam Tendency/Stability: Sequence I Sequence II Sequence III	D892	10/0 20/0 10/0	
Antiwear Additive		Present	
Oxidation Inhibitors		Present	
Corrosion Inhibitors		Present	
Copper Strip Corrosion		1A	
Color		Emerald Green	

COLOR: 999 S & F GEAR OIL is dyed an emerald green to allow product identification for filling the unit and for leak detection.

DO NOT CONFUSE THIS PRODUCT WITH TEXAS REFINERY CORP. UNIVERSAL TORQUE FLUID BECAUSE OF THE COLOR. NOT FOR USE IN DIFFERENTIALS.

Handling Information: For safe handling of the product, read the Safety Data Sheet (SDS).

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