

PRODUCT IDENTIFICATION



Product Name: Full Synthetic SAE 75W-90 Heavy Duty Gear Lubricant

CAS Number: 64742-54-7

Molecular Formula: Not Available

Molecular Weight: 850.00 g/mol

Grade: Technical Grade

Purity / Concentration: Not Available

Synonyms: Synthetic Gear Oil 75W-90, 75W-90 Synthetic Lubricant

PRODUCT OVERVIEW

Alliance Chemical's Full Synthetic SAE 75W-90 Heavy Duty Gear Lubricant is a high-performance technical grade fluid engineered for demanding mechanical environments. Featuring an impressive viscosity index of 162.0 and a low pour point of -48 °C, this lubricant provides reliable protection across extreme temperature ranges in heavy-duty transmissions and differentials.

Grade Significance: Technical grade signifies that this lubricant is formulated for industrial and mechanical efficiency, offering the necessary chemical performance for heavy-duty applications without the price premium of laboratory-grade chemicals.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Specific Gravity (25°C)	g/mL	0.866	0.85	0.9	IS: 548
Viscosity Index	cP	162.0	140.0	—	Per specification
Flash Point	°C	205.0	200.0	—	Per specification
Pour Point	°C	-48	—	-30	Per specification

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear to amber liquid	Odor	Mild petroleum odor
Flash Point	200°C (392°F)	Specific Gravity	~0.86
Solubility	Insoluble in water, soluble in organic solvents	Molecular Weight	850.00 g/mol
Vapor Pressure (20°C)	0.1 mmHg	Density (25°C)	0.87 g/mL

APPLICATIONS

- Automotive and Fleet** — Used in manual transmissions and differentials to provide optimal lubrication and extended component life under heavy loads.
- Heavy Construction** — Ideal for heavy-duty machinery operating under extreme pressures and variable temperature conditions common on job sites.
- Manufacturing** — Provides superior lubrication for industrial gearboxes and high-load bearings to ensure consistent operational efficiency.
- Marine** — Suitable for marine applications where robust water resistance and advanced corrosion protection are critical for equipment longevity.

STORAGE & HANDLING

Proper storage is essential to prevent moisture contamination and oxidation, which can degrade the synthetic base oil's performance characteristics. Given the flash point of 205.0 °C, containers must be kept in a cool, well-ventilated area away from open flames or high-heat sources to maintain safety and product integrity.

- Store in a cool, dry place away from direct sunlight.
- Use containers made of HDPE or stainless steel to prevent contamination.
- Avoid mixing with other lubricants unless compatibility is confirmed.
- Ensure proper ventilation when handling to avoid inhalation of vapors.
- Wear appropriate personal protective equipment (PPE) such as gloves and goggles.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Not Classified

No GHS pictograms assigned.

Hazard Statements:

- Not Classified: This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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