

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**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 oil engineered for extreme thermal stability and protection. With a high viscosity index of 152.0 and a low pour point of -42°C, this lubricant ensures consistent performance across demanding operating conditions in transmissions and differentials.

Grade Significance: Technical grade indicates that this product is formulated for optimal industrial performance and mechanical efficiency, prioritizing functional efficacy over cosmetic purity.

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)	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** — Designed for use in heavy-duty manual transmissions and differentials to reduce friction and prevent premature gear wear.
- Heavy Machinery** — Provides essential lubrication for industrial gearboxes operating under constant, high-load conditions where standard oils fail.
- Marine** — Offers superior water resistance and anti-corrosion properties, making it ideal for marine drivetrain components exposed to moisture.
- Manufacturing** — Used in complex bearing systems that require high-viscosity synthetic lubrication to maintain operational efficiency.

STORAGE & HANDLING

Proper storage is essential to maintain the chemical integrity and anti-foaming properties of this synthetic lubricant. Keep containers tightly sealed in a cool, dry area away from direct heat sources to prevent oxidation and ensure the flash point remains stable for safe handling.

- 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: **WARNING**

No GHS pictograms assigned.

Hazard Statements:

- H227: Combustible liquid
- H315: Causes skin irritation

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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