

PRODUCT IDENTIFICATION

**Product Name:** Full Synthetic SAE 85W-140 Heavy Duty Gear Lubricant**CAS Number:** 64742-54-7**Molecular Formula:** Not Available**Molecular Weight:** 870.50 g/mol**Grade:** Technical Grade**Purity / Concentration:** Not Available**Synonyms:** Synthetic Gear Oil 85W-140, SAE 85W-140 Synthetic Lubricant

PRODUCT OVERVIEW

Alliance Chemical's Full Synthetic SAE 85W-140 is a high-performance technical grade gear lubricant engineered for extreme pressure applications. Featuring a robust viscosity index of 155.0 and a flash point of 224.0 °C, this synthetic formula ensures consistent thermal stability and protection in demanding automotive and industrial gear systems.

Grade Significance: Technical Grade indicates that this lubricant is formulated for performance and industrial utility, prioritizing functional efficiency for mechanical systems over laboratory-grade purity.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Specific Gravity (25°C)	g/mL	0.91	0.88	0.93	IS: 548
Viscosity Index	cP	155.0	140.0	—	Per specification
Flash Point	°C	224.0	200.0	—	Per specification
Pour Point	°C	-18	—	-10	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	~0.89
Solubility	Insoluble in water, soluble in organic solvents	Molecular Weight	870.50 g/mol
Vapor Pressure (20°C)	0.1 mmHg	Viscosity (25°C)	15 cP
Refractive Index (20°C)	1.460	Density (25°C)	0.885 g/mL

APPLICATIONS

- Automotive** — Used in heavy-duty differentials and manual transmissions to provide superior lubrication and wear protection under high-torque conditions.
- Industrial Manufacturing** — Ideal for enclosed gear systems and heavy machinery operating under continuous high loads and elevated temperatures.
- Marine** — Suitable for marine gearboxes and stern drives, offering excellent water resistance and long-term component durability.
- Construction** — Provides reliable lubrication for earth-moving machinery and heavy equipment operating in harsh, outdoor environments.

STORAGE & HANDLING

Proper storage in a cool, dry, and well-ventilated area is critical to maintain the chemical integrity and viscosity characteristics of this synthetic lubricant. Given the flash point of 224.0 °C, containers must be kept away from open flames and extreme heat sources to mitigate fire risks and prevent product degradation.

- Store in a cool, dry place away from direct sunlight.
- Use appropriate personal protective equipment (PPE) when handling.
- Avoid contact with strong oxidizing agents.
- Keep containers tightly closed when not in use.
- Compatible with HDPE and stainless steel containers.

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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