

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**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 Heavy Duty Gear Lubricant is a high-performance technical grade fluid designed for extreme pressure environments. With a robust viscosity of 24.5 cSt at 100°C and a high Timken OK load of 65 lbs, this lubricant ensures superior wear protection for critical gear assemblies.

Grade Significance: Technical grade indicates that this product is formulated specifically for industrial and mechanical utility, ensuring consistent performance for heavy-duty applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Specific Gravity (25°C)	g/mL	0.91	0.85	0.9	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)	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** — Provides essential lubrication for heavy-duty differentials and manual transmissions to reduce friction and heat.
- Industrial Manufacturing** — Ideal for stationary gear systems that operate under constant high loads and elevated temperatures.
- Marine** — Suitable for marine gearboxes and stern drives where water resistance and corrosion protection are vital.
- Construction** — Ensures reliable performance for heavy machinery operating in harsh, demanding environmental conditions.

STORAGE & HANDLING

Proper storage in a cool, dry, and well-ventilated area is essential to maintain the lubricant's chemical integrity and prevent oxidation. While the flash point of 200°C suggests a stable profile, keeping containers tightly sealed prevents contamination and mitigates potential fire hazards.

- 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: **WARNING**

No GHS pictograms assigned.

Hazard Statements:

- H227: Combustible liquid
- H304: May be fatal if swallowed and enters airways

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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