Technical Data Sheet

Full Synthetic SAE 75W-90 Heavy Duty Gear Lubricant

Alliance Code	Revised	Revision
75w-90	2026-10-13	1.2

CAS number	
64742-54-7	

IDENTITY & COMPOSITION

PRODUCT NAME
Full Synthetic SAE 75W-90 Heavy Duty Gear Lubricant

ALLIANCE CODE
75w-90

GRADE
—

CONCENTRATION
—

CAS NUMBER
64742-54-7 Adjudicated

PRODUCT TYPE
—

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Kinematic viscosity at 100 °C (SAE 90 grade requirement)	13.5 - < 18.5 cSt	—	ASTM D445 (or ASTM D7042)	Interpreted
Flash point, Cleveland open cup	190 C min	—	ASTM D92	Interpreted
Pour point	-40 C max	—	ASTM D97	Interpreted
Copper strip corrosion, 3 h at 121 C	2a max	—	ASTM D130	Interpreted

Values are reproduced from the current product reference. Source labels do not by themselves establish a supplier guarantee or a test result for your lot. Confirm applicable acceptance limits and request lot-specific documentation.

PHYSICAL & CHEMICAL PROPERTIES

PROPERTY	VALUE	SOURCE
Appearance	Clear amber viscous liquid	Published reference
Form	Liquid	Published reference
Odor	Mild petroleum	Published reference
pH	Not applicable	Published reference
Specific Gravity	~0.86	Published reference
Density	0.855 - 0.885 g/ml	Interpreted
Boiling Point	>260 °C	Published reference
Melting Point	Pour point ~ -45 °C	Published reference
Flash Point	>150 °C (closed cup)	Published reference
Vapor Pressure	Negligible	Published reference
Solubility (water)	Insoluble in water	Published reference

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

Not regulated **Adjudicated**

HAZARD CLASS

Not regulated **Adjudicated**

PACKING GROUP

Not regulated **Adjudicated**

PROPER SHIPPING NAME

Not regulated **Adjudicated**

GHS / OSHA HCS 2024

SIGNAL WORD

Not regulated **Adjudicated**

H-CODES (HAZARD STATEMENTS)

— **no canonical**

P-CODES (PRECAUTIONARY STATEMENTS)

`P264, P280` **Adjudicated**

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

5 mg/m^3 TWA **OSHA 29 CFR 1910.1000**

ACGIH TLV

— **no canonical**

NIOSH REL

5 mg/m^3 TWA / 10 mg/m^3 STEL **NIOSH Pocket Guide**

NIOSH IDLH

2500 mg/m^3 **NIOSH Pocket Guide**

Transport descriptions reflect 49 CFR 172.101 lookup at time of publication. Sourced data: NIOSH Pocket Guide for REL/IDLH, OSHA Z-Tables for PEL. Always verify against the latest regulatory text before shipment-critical decisions.

APPLICATIONS

SAE 75W-90 is an SAE J306 viscosity designation for automotive driveline and gear lubricants (both the 75W and 90 marks appear in the J306 classification table).

muxxlube.de

Applications are drawn from published manufacturer and supplier documentation; each is sourced. Suitability for a specific use is the buyer's to confirm.

STORAGE & HANDLING

RECOMMENDED STORAGE

Keep in the original container in a dry, cool, well-ventilated place away from strong oxidizers.

Adjudicated

HANDLING PRECAUTIONS

Use standard chemical PPE — splash goggles, gloves, lab coat. Refer to SDS for hazard-specific PPE requirements.

Class-level guidance — not product-specific; the SDS controls.

INCOMPATIBILITIES

Strong oxidizing agents (chlorates, nitrates, peroxides); strong acids.

Adjudicated

SHELF LIFE

Consult Technical Services for product-specific shelf life

For full hazard, PPE, and emergency response guidance, refer to the Safety Data Sheet (SDS) for this product. The SDS controls in all cases where guidance differs.

PACKAGING & LOGISTICS

SHIPPING DESCRIPTION (US DOT)

```
Not regulated for transport.
```

Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS

55

REVISION HISTORY

Last reviewed 2026-10-13 by Andre Taki, Chief Commercial Officer, DOT Hazmat–certified (49 CFR 172.704).

VERSION	DATE	CHANGE	TRIGGER
1.2	2026-10-13	Canonical data updated: 4 fields changed via the provenance/adjudication pipeline. • `storage_precautions` · canonical change (coa.data_provenance / adjudication) • `incompatible_materials` · canonical change (coa.data_provenance / adjudication) • `conditions_to_avoid` · canonical change (coa.data_provenance / adjudication) • `hazardous_decomposition_products` · canonical change (coa.data_provenance / adjudication)	`canonical_change`

VERSION	DATE	CHANGE	TRIGGER
1.1	2026-10-05	Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. • `oel_niosh_rel` · canonical change (coa.data_provenance / adjudication) • `oel_idlh` · canonical change (coa.data_provenance / adjudication) • `oel_osha_pel` · canonical change (coa.data_provenance / adjudication)	`canonical_change`

This Technical Data Sheet is provided for technical reference. The Safety Data Sheet (SDS) controls in all cases where guidance differs. Values reflect Alliance Chemical canonical data at time of generation; subsequent revisions are recorded in the Revision History above.