

PRODUCT

Data Sheet

VELTRA

500T

SAE 15W40

GALANA VELTRA 500T 15W-40 is a dependable heavy-duty diesel engine oil formulated from high-quality mineral base oils with a balanced detergent/dispersant, anti-wear, oxidation-control and corrosion-inhibition additive system. It is designed for high-speed four-stroke diesel engines operating in demanding on-road and off-road service, particularly applications requiring API CH-4 performance and robust protection against soot, deposits, wear and oil thickening.

KEY BENEFITS

- **HIGH-TEMPERATURE DEPOSIT CONTROL:** Helps limit piston, ring and oil-gallery deposits under sustained high-load and high-temperature operation.
- **RELIABLE WEAR PROTECTION:** Helps protect bearings, valve-train components, rings and liners against wear in heavy-duty service.
- **SOOT & SLUDGE CONTROL:** Detergent/dispersant chemistry helps keep combustion by-products suspended and reduces soot-related sludge and deposit formation.
- **OXIDATION & VISCOSITY CONTROL:** Helps resist thermal oxidation, oil thickening and high-temperature degradation during demanding duty cycles.
- **CORROSION & RUST PROTECTION:** Helps neutralize acidic combustion by-products and protect ferrous engine surfaces from corrosive attack.
- **15W-40 MULTIGRADE PERFORMANCE:** Provides dependable cold-start flow with robust high-temperature viscosity for a broad range of operating conditions.

APPLICATIONS

- Heavy-duty diesel trucks and buses
- Construction, mining and agricultural equipment
- Generators
- Commercial vehicles
- Other diesel equipment requiring SAE 15W-40 API CH-4 or an earlier compatible requirement.

OEM & PERFORMANCE LEVELS

Galana Veltra 500T is formulated to meet the requirements of:

- API: CH-4
- MAN: M 3275 / M 3275-1
- Volvo Trucks: VDS-3
- Renault Trucks: RLD-2
- Mack: EO-M / EO-M Plus
- Cummins: CES 20076/CES 20077/CES 20078
- Caterpillar: ECF-1A / ECF-2
- Detroit Diesel: 93K215
- MTU: Oil Category 2 / Type 2
- Deutz: DQC III-10
- JASO: DH-1

TECHNICAL DATA

PROPERTY	TEST METHOD	TYPICAL VALUE
SAE Grade	SAE J300	15W-40
Density @15°C kg/m ³	ASTM D4052	870
KV @40°C cSt	ASTM D445	108
KV @100°C cSt	ASTM D445	14.8
Viscosity Index	ASTM D2270	140
TBN mg KOH/g	ASTM D2896	10.0
Sulphated Ash wt%	ASTM D874	1.30
Flash Point °C	ASTM D92	230
Pour Point °C	ASTM D97	-30
CCS @-20°C mPa.s	ASTM D5293	≤7000
Zinc wt%	Typical	0.12
Phosphorus wt%	Typical	0.10



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VELTRA

700M

SAE 15W40

GALANA VELTRA 700M 15W-40 is a premium multigrade heavy-duty diesel engine oil formulated with a balanced detergent/dispersant, anti-wear, oxidation-control and corrosion-inhibition system.

It is positioned for high-speed four-stroke diesel engines requiring API CI-4 / SL and ACEA E7 performance, including demanding EGR-equipped and mixed-fleet applications where enhanced soot handling, acid control, piston cleanliness, wear protection and lubricant stability are required.

KEY BENEFITS

- **EGR & CORROSIVE-WEAR CONTROL:** Designed around the higher durability demands of EGR-era engines, helping protect rings, liners, bearings and other critical surfaces from corrosive wear.
- **ENHANCED SOOT HANDLING:** Strong dispersancy helps control soot loading, soot-related viscosity increase and used-oil pumpability in high-output diesel service.
- **PISTON AND ENGINE CLEANLINESS:** Helps control piston deposits, sludge and varnish while supporting clean oil passages and stable engine operation.
- **OXIDATION & THERMAL STABILITY:** Helps resist oxidation, oil thickening and high-temperature deposit formation under severe thermal loading.
- **SHEAR & VISCOSITY CONTROL:** Helps maintain the SAE 15W-40 viscosity grade under mechanical stress, supporting durable oil-film protection.
- **ACEA E7 HEAVY-DUTY PERFORMANCE:** Supports the E7 focus on piston cleanliness, bore-polishing control, wear protection, soot handling and lubricant stability in severe-service diesel engines.

APPLICATIONS

On-Highway Transport: Long-haul trucks, distribution fleets, buses and coaches, municipal fleets, and waste collection vehicles.

Construction: Dump trucks, excavators, wheel loaders, dozers, graders, cranes, concrete mixers, pavers, compactors, and backhoe loaders.

Mining & Quarrying: Haul trucks, drilling equipment, loaders, excavators, crushers, mobile screening plants, and quarry support equipment.

Agriculture: Tractors, harvesters, combine harvesters, sprayers, balers, irrigation equipment, and agricultural loaders.

Power Generation: Diesel generator sets, prime-power generators, standby generators, industrial gensets, and rental power equipment.

Industrial & Material Handling: Forklifts, industrial diesel engines, pumps, compressors, material-handling equipment, and stationary engines.

Marine / Port Support: High-speed auxiliary diesel engines, workboats, port support equipment, and auxiliary generator engines—where OEM oil requirements permit.

Mixed-Fleet Operations: Fleets combining trucks, buses, construction, agricultural, mining, and stationary diesel equipment requiring SAE 15W-40 API CI-4 / SL / ACEA E7 performance.

TECHNICAL DATA

PROPERTY	TEST METHOD	TYPICAL VALUE
SAE Grade	SAE J300	15W-40
Density @15°C, kg/m³	ASTM D4052	870
KV @40°C, cSt	ASTM D445	110
KV @100°C, cSt	ASTM D445	14.6
Viscosity Index	ASTM D2270	136
TBN, mg KOH/g	ASTM D2896	10.0
Sulphated Ash, wt%	ASTM D874	1.30
Flash Point, °C	ASTM D92	225
Pour Point, °C	ASTM D97	-33
CCS @-20°C, mPa.s	ASTM D5293	≤7000
Zinc, wt%	Typical	0.12
Phosphorus, wt%	Typical	0.10

OEM & PERFORMANCE LEVELS

Galana Veltra 700M is formulated to meet the requirements of:

- API CI-4 / SL
- ACEA E7
- Mercedes-Benz MB 228.3/229.1
- MAN M 3275-1
- Volvo Trucks VDS-3
- Mack EO-M Plus/EO-N
- Renault Trucks RLD-2
- Cummins CES 20076/20077/20078
- Caterpillar ECF-1A/ECF-2
- Detroit Diesel 93K215
- MTU Oil Category 2/Type 2
- Deutz DQC III-10
- IVECO TI/ Applicable current requirement
- JASO DH-1
- Global DHD-1
- Ford WSS-M2C171-D
- Allison C-4 Level

APPLICATION GUIDANCE:

Suitable for naturally aspirated and turbocharged high-speed four-stroke diesel engines and mixed fleets where SAE 15W-40 with API CI-4 / SL and/ or ACEA E7-level performance is specified. Particularly suited to EGR-equipped engines of the applicable generation.

Do not use where the OEM requires a low-SAPS/advanced-aftertreatment lubricant unless the stated product specification is explicitly approved for that application.



PRODUCT Data Sheet

ISO VG 220, 320 & 460

GALANA AXIOM is a range of premium anti-wear industrial hydraulic oils formulated to provide reliable protection and performance in hydraulic systems operating under moderate to high pressures. Developed using high-quality refined mineral base oils and advanced zinc-based anti-wear additive technology, the range delivers strong anti-wear protection, oxidation resistance, rust and corrosion protection, water separation and foam control.

The products are suitable for industrial and mobile hydraulic systems using vanes, gear and piston pumps and are available in **ISO VG 32, 46 and 68**.

KEY BENEFITS

- **ANTI-WEAR PROTECTION:** Minimizes wear in high-pressure vanes, gear and piston pumps.
- **OXIDATION STABILITY:** Help resist oil degradation and sludge/varnish formation.
- **RUST & CORROSION CONTROL:** Protects internal metal surfaces, even in humid environments.
- **FAST AIR RELEASE:** Supports smooth, consistent hydraulic response and reduces foaming.
- **WATER SEPARATION:** Good demulsibility for reliable performance where water contamination is a risk.
- **TEMPERATURE STABILITY:** Maintains stable viscosity performance across the normal operating range.

APPLICATIONS

- Industrial hydraulic systems (vane, gear, piston pumps)
- Mobile and construction equipment
- Machine tools and press equipment
- Circulating and hydrostatic transmission systems
- Marine deck machinery and hydraulic controls
- Injection moulding and die-casting machines
- General industrial and manufacturing machinery

Selection Principle:

Always select the viscosity grade in accordance with the equipment manufacturer's recommendation and the actual speed, load and operating temperature.

PERFORMANCE LEVELS

Galana Axiom is formulated to meet the requirements of:

- DIN 51524 Part 2 HLP (HM)
- ISO 6743/4 Type HM
- ISO 11158 HM
- Eaton Vickers I-286-S, M-2950-S
- Denison HF-0, HF-1, HF-2
- Cincinnati Machine P-68, P-69, P-70

TECHNICAL DATA

PROPERTY	TEST METHOD	32	46	68
ISO Viscosity Grade	ISO 3448	32	46	68
Density @ 15°C, kg/ms	ASTM D4052	868	872	876
Kinematic Viscosity @ 40°C, mm²/s	ASTM D445	32	46	68
Kinematic Viscosity @ 100°C, mm²/s	ASTM D445	5.4	6.8	8.6
Viscosity Index	ASTM D2270	100	99	98
Flash Point, COC, °C	ASTM D92	205	215	228
Pour Point, °C	ASTM D97	-30	-27	-24
FZG Failure Load Stage	ISO 14635-1	10	11	12
Air Release @ 50°C, min	ASTM D3427	4	5	6
Water Separability, min	ASTM D1401	15	18	20



PRODUCT Data Sheet

ISO VG 220, 320 & 460

GALANA GEARAX is a range of premium extreme-pressure industrial gear oils formulated to provide reliable protection and performance in enclosed gear systems operating under moderate to severe loads. Developed using high-quality mineral base oils and advanced EP additive technology, the range delivers strong load-carrying capability, protection against wear and scuffing, oxidation resistance, corrosion protection, water separation and foam control.

The products are suitable for industrial gear systems operating with splash or circulating lubrication and are available in **ISO VG 220, 320 and 460**

KEY BENEFITS

- **EXCELLENT EP PROTECTION:** High load-carrying performance for heavily loaded gears.
- **WEAR & SCUFFING PROTECTION:** Helps protect gear teeth, bearings and associated components.
- **STRONG OIL FILM:** Maintains lubricant-film strength under high and shock loads.
- **OXIDATION STABILITY:** Helps resist oil degradation and deposit formation.
- **WATER & CORROSION CONTROL:** Good demulsibility with effective rust and corrosion protection.
- **CONTROLLED FOAMING:** Supports reliable lubricant circulation and consistent protection.

APPLICATIONS

- Enclosed spur, helical and bevel gears
- Industrial reduction gearboxes and speed reducers
- Heavy-duty gear drives
- Circulating and splash-lubricated systems
- Conveyors, crushers and mills
- Mixers, agitators, mining and cement equipment
- Construction, manufacturing and general industrial machinery

Selection Principle:

Always select the viscosity grade in accordance with the equipment manufacturer's recommendation and the actual speed, load and operating temperature.

PERFORMANCE LEVELS

Galana Gearax is formulated to meet the requirements of:

- DIN 51517 Part 3 CLP
- ISO 12925-1 L-CKD
- AGMA 9005
- U.S. Steel 224
- David Brown SL53.101

TECHNICAL DATA

PROPERTY	TEST METHOD	220	320	460
ISO Viscosity Grade	ISO 3448	220	320	460
AGMA Equivalent	AGMA	5 EP	6 EP	7 EP
Density @ 15°C, kg/m³	ASTM D4052	890	900	905
Kinematic Viscosity @ 40°C, mm²/s	ASTM D445	220	320	460
Kinematic Viscosity @ 100°C, mm²/s	ASTM D445	19.0	24.1	30.5
Viscosity Index	ASTM D2270	97	97	96
Flash Point, COC, °C	ASTM D92	240	240	250
Pour Point, °C	ASTM D97	-24	-21	-15
Copper Strip Corrosion	ASTM D130	1B	1B	1B
Rust Protection	ASTM D665	Pass	Pass	Pass
FZG Failure Load Stage	ISO 14635-1	12+	12+	12+
Timken OK Load, lb	ASTM D2782	≥60	≥60	≥60



PRODUCT

Data Sheet

TRANSO

PREMIUM

SAE 80W-90 & SAE 85W-140

GALANA TRANSO PREMIUM SAE 80W-90 and SAE 85W-140 are high-performance automotive gear lubricants formulated from high-quality base oils and a balanced additive system. They are designed for manual transmissions, axles, final drives and differential units requiring API GL-4 level protection against wear and scoring. The formulation provides dependable lubrication, thermal and oxidation stability, rust and corrosion protection, and controlled foaming under demanding operating conditions.

KEY BENEFITS

- Effective anti-wear and load-carrying protection for gears, bearings and transmission components.
- Protection against scoring and wear in manual transmissions, axles and final-drive assemblies.
- Good thermal stability and oxidation resistance to help maintain lubricant performance and component life.
- Effective rust and corrosion protection for ferrous and other compatible drivetrain components.
- Good low-temperature fluidity to promote lubrication during start-up and cold operation.
- Good foam control to support consistent lubrication and hydraulic action within gearboxes.
- Helps reduce maintenance requirements and extend the service life of transmission and axle components.
- Suitable for moderate-to-severe automotive and industrial gear applications where API GL-4 is specified.

APPLICATIONS

Manual transmissions: Heavy-duty and automotive manual gearboxes requiring API GL-4 performance.

Axles & final drives: Axles, final drives and differential units where GL-4 gear lubricant is specified.

On-highway vehicles: Passenger cars, light/heavy trucks, buses, vans and commercial vehicles subject to OEM requirements.

Off-highway equipment: Construction, mining, quarrying and agricultural equipment requiring GL-4 gear oil.

Industrial gearing: Automotive and industrial gear applications operating under moderate-to-severe conditions.

Synchronised transmissions: Suitable where the OEM specifies API GL-4 and the selected viscosity grade.

TECHNICAL DATA

PROPERTY	TEST METHOD	80W-90	85W-140
SAE Grade	SAE J306	80W-90	85W-140
Density @ 20 °C, g/cm³	ASTM D4052-18A	0.8780	0.8953
Kinematic Viscosity @ 40 °C, mm²/s	ASTM D445-19	137.9	404.2
Kinematic Viscosity @ 100 °C, mm²/s	ASTM D445-19	14.91	29.04
Viscosity Index	ASTM D2270	109	100
Flash Point, °C	ASTM D92	230	250
Pour Point, °C	ASTM D97	-36	-15

PERFORMANCE LEVELS & BENCHMARK REQUIREMENTS

Galana Transo Premium is formulated to meet the requirements of:

- API GL-4
- SAE J306
- ZF TE-ML 02B / 17A
- MAN 341 Type Z2 / E2
- Eaton requirements
- Isuzu requirements
- Scania STO MTF



TRANSO ULTRA

PRODUCT Data Sheet

SAE 80W-90 & SAE 85W-140

GALANA TRANSO ULTRA SAE 80W-90 and SAE 85W-140 are premium heavy-duty automotive gear lubricants formulated with high-quality base oils and a balanced extreme-pressure additive system. They are engineered to protect heavily loaded gears, bearings and final-drive components operating under high torque, shock loading, elevated temperatures and severe on and off-highway conditions.

KEY BENEFITS

- Strong extreme-pressure and load-carrying performance for heavily loaded gear sets.
- High resistance to wear, scoring and scuffing under high-torque and shock-load conditions.
- Good thermal and oxidation stability to help control lubricant degradation and deposits.
- Effective rust and corrosion protection for gears and bearings.
- Good low-temperature flow characteristics for improved cold-start lubrication.
- High film strength for hypoid gears and final drives.
- Suitable for demanding commercial, construction, mining, quarrying and agricultural applications.
- Helps reduce gear wear, component damage and lubricant-related downtime

APPLICATIONS

Heavy-duty axles & final drives: Drive axles, differentials and final drives requiring API GL-5 EP performance.

Hypoid gears: High-speed/shock-load, high-speed/low-torque and low-speed/high-torque gear applications.

Commercial vehicles: Trucks, buses, vans and other on-highway commercial vehicles where the OEM specifies GL-5 gear oil.

Off-highway equipment: Construction, mining, quarrying and agricultural machinery.

Industrial automotive gearing: Enclosed automotive gear drives and other heavy-duty applications where the lubricant viscosity and GL-5 level are specified.

TECHNICAL DATA

PROPERTY	TEST METHOD	80W-90	85W-140
SAE Grade	SAE J306	80W-90	85W-140
Density @ 20 °C, g/cm³	ASTM D4052	0.8838	0.8932
Kinematic Viscosity @ 40 °C, mm²/s	ASTM D445	142.62	326.7
Kinematic Viscosity @ 100 °C, mm²/s	ASTM D445	15.12	24.74
Viscosity Index	ASTM D2270	126	97
Flash Point, °C	ASTM D92	230	246
Pour Point, °C	ASTM D97	-3	-12

PERFORMANCE LEVELS & BENCHMARK REQUIREMENTS

Galana Transo Ultra meets the following performance levels;

- | | |
|-------------------------------------|-------------------|
| • API GL-5: | 80W-90/85W-140 |
| • API MT-1: | 80W-90/85W-140 |
| • SAE J2360: | 80W-90/85W-140 |
| • Meritor O-94: | 80W-90/85W-140 |
| • Scania STO 1:0: | 80W-90/85W-140 |
| • MAN 342 Type M2: | 80W-90 |
| • MAN 342 Type M1: | 85W-140 |
| • ZF TE-ML 05A/12E/16B/17B/19B/21A: | Primarily 80W-90 |
| • ZF TE-ML 07A/12E/16D/21A: | Primarily 85W-140 |
| • Volvo 97321: | 80W-90 / 85W-140 |
| • Mack GO-J / GO-H: | 80W-90 / 85W-140 |

