# **HYPER-MAX T12 10W-40**

# **HEAVY DUTY DIESEL ENGINE OIL**

## PREMIUM 100% SYNTHETIC TECHNOLOGY

HIGH PERFORMANCE LOW ASH COMMERCIAL VEHICLE ENGINE OIL DEVELOPED FROM DECADES OF EXPERIENCE IN CONJUNCTION WITH ORIGINAL EQUIPMENT MANUFACTURERS.

THE USE OF OUR PROPRIETARY BASE OIL TECHNOLOGY, ALONG WITH INNOVATIVE ADDITIVE CHEMISTRY GUARANTEES LONG OIL LIFE AND PERFORMANCE WITHOUT ANY COMPROMISE OF ENGINE RELIABILITY.



#### APPLICATIONS

DESIGNED FOR SEVERE DUTY EUROPEAN, US & ASIAN COMMERCIAL VEHICLE ENGINES WHICH MEET EURO 6, 5, 4, 3, 2 OR US 2002 EMISSIONS REGULATIONS, INCLUDING THOSE FITTED WITH DIESEL PARTICULATE FILTER (DPF), SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND/OR EXHAUST GAS RECIRCULATION (EGR), WHERE PERFORMANCE SPECIFICATIONS AND VISCOSITY GRADE ARE APPROPRIATE. ALSO SUITABLE FOR CERTAIN MOBILE GAS APPLICATIONS WHERE PERFORMANCE SPECIFICATIONS ARE APPROPRIATE.

DESIGNED FOR USE IN CONJUNCTION WITH ULTRA LOW SULPHUR DIESEL (ULSD) FUELS.

ALWAYS REFER TO VEHICLE HANDBOOK / OWNERS MANUAL FOR RECOMMENDED OIL SPECIFICATION & VISCOSITY GRADE BEFORE USE.

#### KEY FEATURES

- HIGH PERFORMANCE PREMIUMTECHNOLOGY
- LOW ASH / LOW SAPS FORMULATION TO ENSURE AFTERTREATMENT DEVICE COMPATIBILITY SUCH AS DIESEL PARTICULATE FILTERS (DPF)
- STAYS IN VISCOSITY GRADE FOR ENTIRE DRAIN INTERVAL
- VERY LOW OIL VOLATILITY SIGNIFICANTLY REDUCES OIL CONSUMPTION
- HELPS PREVENT DIRT AND SLUDGE BUILD UP TO MAINTAIN ENGINE RESPONSIVENESS, REDUCE VIBRATION AND KEEP ENGINE QUIET
- EXCELLENT OXIDATION RESISTANCE PROVIDES LONG OIL LIFE
- MISCIBLE WITH ALL MINERAL & SYNTHETIC ENGINE OIL

### PERFORMANCE SPECIFICATIONS & SYNTOL RECOMMENDATIONS

API CK-4, CJ-4, CI-4, CH-4, CG-4, CF-4

ACEA E7, E8, E11 (ALSO SUITABLE FOR OBSOLETE E6 & E9)

JASO DH-2
CASE MAT 3521
CATERPILLAR ECF-3

CUMMINS CES 20086, 20081, 20092

 DETROIT DIESEL
 93K222

 DEUTZ
 DQC IV-18-LA

 MACK
 EOS-4.5

MAN M3775, M3477, M3575

MERCEDES BENZ / DAIMLER TRUCK MB 228.31, 228.51, 228.52 / DTFR 15C100, 15C110, 15C120

MTU 3.1 / 2.1

 RENAULT
 RLD-4, RLD-3, RGD

 VOLVO
 VDS-4.5, VDS-4, VDS-3

### PHYSICAL & CHEMICAL CHARACTERISTICS

PROPERTY	METHOD	UoM	TYPICAL	LIMITS
VISCOSITY GRADE	SAE J300	-	10W-40	•
RELATIVE DENSITY @ 15°C	ASTM D4052	g/cm3	0.869	-
KINEMATIC VISCOSITY @ 40°C	ASTM D445	mm2/s	93.00	-
KINEMATIC VISCOSITY @ 100°C	ASTM D445	mm2/s	13.90	12.5 < 16.3
VISCOSITY INDEX	ASTM D2270	-	154	-
POUR POINT	ASTM D97	°C	-36	-30 MAX.
FLASH POINT (CoC)	ASTM D92	°C	222	-
TBN – TOTAL BASE NUMBER	ASTM D2896	mgKOH/g	10.3	10.0 MIN.
APPEARANCE	ASTM D4176-1	-	CLEAR & BRIGHT	-
COLOUR	VISUAL	-	AMBER	-





