Black Bulls

Grease & Lubricants Manufacturing LLC.



Technical data sheet Engine oil

TIARA 10W-30 CI-4/SL

Diesel Engine Oil HDDEO

PERFORMANCE LEVELS: Meets and Exceeds

 $ACEA\ E5/E7,\ MB\ 228.3,\ CAT\ ECF-1a\ ECF-2/3,\ ALISON\ C-4,\ MAN\ 3275,\ MIL-L-2104D,\ CUMMINS\ CES\ 20081,\ VOLVO\ VDS-3,\ RENAULT\ RLD-3$

Black Bulls **TIARA** Synthetic Heavy-Duty Diesel Engine oil (HDDEO) contains semi synthetic base stock formulated with the multiple advance additives technology. TIARA Semi synthetic diesel engine oil provides superior lubrication for both on- and off-road diesel engines with EGR or DPF and high speed four stroke diesel engine for commercial, personal or off-road application or as recommended by OEM.

Typical properties:

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUES
SAE VISCOSITY GRADE			10W-30
APPEARANCE	NA	VISUAL	B&C
COLOR	NA	ASTM D-1500	2.0
DENSITY @29.5°C	g/mL	ASTM D-4052	0.8700
KINEMATIC VISCOSITY @100°C	cSt	ASTM D-445	10.5
KINEMATIC VISCOSITY @40°C	cSt	ASTM D-445	Report
VISCOSITY INDEX	NA	ASTM D-2270	145
CORRECTED FLASH POINT	°C	ASTM D-92	224
HOMOGENEITY/MISCIBILITY	NA	ASTM D-6922	Pass
ACCEPTABLE ODOR	NA	VISUAL	Agreeable
POUR POINT	°C	ASTM D-97	-36
TOTAL BASE NO. (TBN)	mg KOH/g	ASTM D-2896	10.5

Advantages:

- Exhibits easier cold weather starting
- Resists breakdown at high temperatures.
- Resisting deposits caused by soot and acids
- Withstands the stress of heat, wear and corrosion
- Longer drain intervals and smooth running of engines.
- Good compatibility with rubber to Protect rubber seals.
- Increases fuel economy due to ultra-low vaporization loss.
- Specially designed for Engine with EGR and turbochargers fitted.
- Highly efficient in dispersancy and detergency keeps engine clean.
- Reduces Kinetic energy loss out of friction wear by effectively dispersing ash and deposits.

Performance Specification:

- This product meets or exceeds the following specifications
- API CI-4 and lower API, such as CH-4 and CF-4

Applications:

Use for all diesel engines where API CI-4 or lower and above service grade recommended by the manufacturer. Serves best
for diesel engines with EGR system and turbochargers.