

# HERCULES LD 10W-40

## SYNTHETIC TECHNOLOGY LONG DRAIN DIESEL ENGINE OIL

**BULWARK HERCULES** oils are synthetic blend, long drain Super High-Performance Diesel engine oils (SHPD) designed to meet latest ACEA requirements and more challenging OEM specifications for Euro 4 & 5 compliant diesel vehicle equipped with EGR, SCR & NOx reduction systems. Not recommended for engines with diesel particulate filters (DPF).

**BULWARK HERCULES LONG DRAIN 10W-40** oil is manufactured using optimized combination of synthetic and mineral base oil with premium additives to provide proven & reliable long drain interval and all year-round performance. Recommended for use in naturally aspirated and turbo-charged high speed 4-stroke diesel engines deployed in off-highway and on-highway applications including the mining & construction industry, where ACEA E4, E7 & API CI-4 oils are specified.

### PERFORMANCE LEVEL

- API CI-4
- ACEA E4, E7-12
- MB 228.5
- MAN M3277, 3377
- VOLVO VDS-3; RENAULT RLD-2
- MTU TYPE 3
- Cummins CES 20077/78
- JASO DH-1; GLOBAL DHD-1

### KEY BENEFITS

- Lower maintenance costs from minimized piston crown deposits and prevents damage to bore.
- SAE 10W-40 multi-grade viscosity ensures improved oil circulation and reduced friction at start-up and maximum lubricity at higher operating temperatures.
- Excellent oxidation stability & BN reserves ensure negligible oil degradation and improves oil service life in turn providing Longer drain intervals.
- Lower oil consumption due to high shear stable VI improvers and low volatile synthetic base fluids.

### TYPICAL CHARACTERISTICS

Properties	Test Methods	10W-40
Density @ 29.5°C, Kg/m3	ASTM D4052	0.859
Kinematic Viscosity @ 100°C cSt	ASTM D7042	13.90
Viscosity Index	ASTM D2270	162
Cold Cranking Viscosity at -25°C, mPa-s	ASTM D5293	5180
Borderline Pumping Viscosity at -30°C, mPa-s	ASTM D4684	27,800
Sulphated Ash, %	ASTM D874	1.38
Flash Point, COC, °C	ASTM D92	242
Foam Stability	ASTM D892	
Seq I		0/0
Seq II		0/0
Seq III		0/0
Pour Point, °C	ASTM D97	-42
Total Base Number, mg KOH/g	ASTM D2896B	12.85

PS: The above information is typical data and an indication based on current production. It does not constitute a specification.

### STORAGE

All packages should be stored under cover. Where outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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