



# LubeWerks® 4SS HE Heavy Duty Diesel Engine Oil



## Fully Formulated 10W-30 Advanced API CK-4 Heavy Duty Engine Oil

- **Provides ultimate wear protection**
- **High resistance to oxidation**, keeping the oil fresher for longer
- **Reduces friction** to maximize horsepower
- **Superior lubrication flow and pumpability** at high and low temperatures
- **Provides improved fuel economy**
- **Excellent protection** against the formation of sludge and harmful deposits

### LubeWerks® DDP TECHNOLOGY HEAVY DUTY ENGINE OILS

The life force of any fleet business is its vehicles, so unplanned downtime can have a hugely damaging impact on a company's efficiency and profitability. The right lubricants and greases play a vital role in helping protect critical components against wear, deposits and corrosion, giving fleet managers the peace of mind that their equipment is protected in all conditions, even when operating at maximum load.

## LubeWerks® Fleet Heavy Duty Engine Oil

LubeWerks® DDP Triple Protection+ Engine Oil is formulated to protect against engine wear, deposits and oil breakdown. Fleet helps provide reliable protection and performance in fleet and off-highway equipment, offering the convenience of a single oil suitable for a wide range of vehicle manufacturers.

## Improved technology. Same hard work.

LubeWerks® DDP Triple Protection+ Engine Oil builds upon the heritage of Triple Protection® you have come to depend on. Today, it's more advanced than ever, designed to provide hard working protection that adapts to driving conditions resulting in:

- **Enhanced protection against oxidation**
- **Enhanced wear protection**
- **Improved deposit control cleanliness**
- **Sustained emission control system durability in particulate filters and after-treatment systems.**

## For every hard working need.

LubeWerks® DDP Triple Protection+ is suitable for a wide range of heavy duty engine applications. With its wide range of specifications, and approvals from many of the world's leading engine makers, it is an excellent choice for on-highway fleets, general haul, construction, agriculture, public-transport operators and diesel pick-up trucks, including high-power vehicles where resistance to increased heat and stress is required.

## CONTINUED

The most technically advanced **LubeWerks®** formulation ever. It is designed to effectively sustain emissions control system durability, where diesel particulate filters and after-treatment systems are used. Plus it provides enhanced protection against viscosity loss due to shear and improved oil aeration. The exclusive low-ash formulation helps protect the exhaust catalysts and diesel particulate filters found on the latest low-emission vehicles. Shell ROTELLA® T4 DDP Triple Protection+ is suitable for virtually all modern low-emission heavy duty engines and older, hard working diesel engines.

### Bring on the heat

**LubeWerks®** DDP Triple Protection+ Heavy Duty Engine Oil shows significantly improved resistance to oil breakdown under high temperatures. Tests prove that DDP Triple Protection+ resists oxidation up to 50% longer than the previous generation of **LubeWerks®** DDP Triple Protection+. The result? **LubeWerks®** DDP Triple Protection+ protects against wear and deposits and keeps engines running long, clean and operating efficiently.

### Wear protection beyond CK-4 standards

In API industry wear tests, **LubeWerks®** DDP Triple Protection+ 15W-40 didn't just meet CK-4 specs, it delivered an average of 50% more wear protection than required. That's protection where it matters most— on the road.

## APPLICATIONS AND CREDENTIALS

| Product Performance       | Recommended Treat Rate of LubeWerks CV1100 MA |
|---------------------------|-----------------------------------------------|
|                           | 100.00% by weight                             |
| API CK-4                  | L                                             |
| ACEA E9-16 (2016)         | A                                             |
| MB-Approval 228.31        | A                                             |
| MAN M 3575                | A                                             |
| MTU Type 2.1              | A                                             |
| Volvo VDS-4.5             | A                                             |
| Mack EO-S-4.5             | A                                             |
| Renault Truck RLD-3       | A                                             |
| Cummins CES 20086         | A                                             |
| CAT ECF-3                 | A                                             |
| Deutz DQC III-10 LA       | A                                             |
| Detroit Diesel DDC 93K222 | A                                             |
| JASO DH-2                 | L                                             |
| FORD WSS-M2C171-F1        | A                                             |

\*All LubeWerks product performance claims are only applicable when the additive package is used with defined base oil(s), viscosity modifier(s) and other required components to produce the applicable viscosity grade in a properly blended finished fluid.

<sup>1</sup> - Volume treatment rates are approximate as the actual treat rate is dependent on the density of all components in a blend

**A** - Approved-Formal written approval provided from a governing body such as an OEM, regulatory agency or an industry organization

**L** - Licensable-Licensable against an active API category

**M** - Meets-All required testing meets defined specification requirements; however, no formal approval provided, claim is self-certified

**S** - Suitable for Use (SFU) - Considered suitable for use based on laboratory testing, field testing and engineering judgment (where there is no regulatory prohibition)

TYPICAL CHARACTERISTICS<sup>2</sup>

| Characteristic            | Typical Value  | Unit   | Method         |
|---------------------------|----------------|--------|----------------|
| Physical State            | Liquid         | -      | -              |
| Form                      | Liquid         | -      | -              |
| Color/Appearance          | Amber          | -      | -              |
| Odor                      | Characteristic | -      | -              |
| CALCIUM                   | 0.242          | %      | LZ Test Method |
| NITROGEN                  | 0.13           | %      | ASTM D 4629    |
| PHOSPHORUS                | 0.101          | %      | LZ Test Method |
| SULFUR                    | 0.3            | %      | LZ Test Method |
| ZINC                      | 0.11           | %      | LZ Test Method |
| FLASH POINT, C, COC       | 228            | °C     | ASTM D 92      |
| FLASH POINT, C, PMCC      | 199            | °C     | ASTM D 93      |
| LBS PER GAL @ 15.6 C      | 7.26           | lbs    | CALCULATED     |
| POUR POINT, C             | -45            | °C     | ASTM D 5950    |
| SPECIFIC GRAVITY @ 15.6 C | 0.871          | SPGRAV | ASTM D 4052    |
| VISCOSITY @ 100 C, CST    | 11.7           | CST    | ASTM D 445     |
| VISCOSITY @ 40 C, CST     | 80             | CST    | ASTM D 445     |

<sup>2</sup>Not a manufacturing specification



**LubeWerks® 4SS HE**

*let's you play in the dirt everyday.*

**ADDITIONAL RECOMMENDATIONS**

\* Holding the material in excess of this temperature may cause chemical degradation. Use steam for heating and tracing only when the material is in motion to avoid localized overheating. Cold Temperature Storage - If product has been stored below its pour point temperature it should be heated to 21°C/70°F before using.

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For further information, please visit [www.lubewerks.com](http://www.lubewerks.com)



**LubeWerks® 4SS HE**  
*keeps your fleet up and runnin'!*