



LubeWerks® 4SS HE2 Heavy Duty Diesel Engine Oil



Advanced, Fully Formulated 0W-40 Low Viscosity Heavy Duty Engine Oil

LubeWerks® 4SS HE2 has CK-4 and ky OEM credentials, and is an ideal solution for commercial transportation in cold-weather climates.

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.

- **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® SYNTHETIC BLEND HEAVY DUTY ENGINE OIL

LubeWerks® Synthetic Blend Technology synthetic blend heavy duty engine oil with DDP Triple Protection+ technology uses synthetic base oils plus advanced additive technology to provide protection against wear, deposits and oil breakdown.

TRIPLE PROTECTION, AND MORE

LubeWerks® 0W-40 Synthetic Blend with DDP Triple Protection+ technology delivers all the benefits you've come to expect from LubeWerks®, and then some. DDP Triple Protection + is the unique combination of Triple Protection - advanced additive technology and synthetic base oils including Chevron Base Oil technology. LubeWerks DDP Triple Protection Plus is a 99.5% pure base oil. DDP Triple Protection+ means protection against wear, deposits, and oil breakdown plus better low temperature flow which delivers excellent equipment protection, long engine life and maintains viscosity control under high temperatures.

IT DELIVERS:

- **Excellent wear protection**
- **Exceptional deposit control/cleanliness**
- **Excellent protection against oil breakdown**
- **Sustained emission control system durability in particulate filters and after-treatment systems**

CONTINUED

FOR EVERY HARD WORKING NEED

LubeWerks® 0W-40 Synthetic Blend Technology is suitable for a wide range of heavy duty engine applications. With its wide range of specifications, and approvals from many leading engine makers, it is an excellent choice for on-highway fleets, construction, agriculture, and diesel pick-up trucks, including high-power vehicles where resistance to increased heat and stress is required. It provides all the protection you expect from an SAE 0W-40 but in a synthetic blend heavy duty engine oil.

GOING BEYOND CK-4 WEAR LIMITS

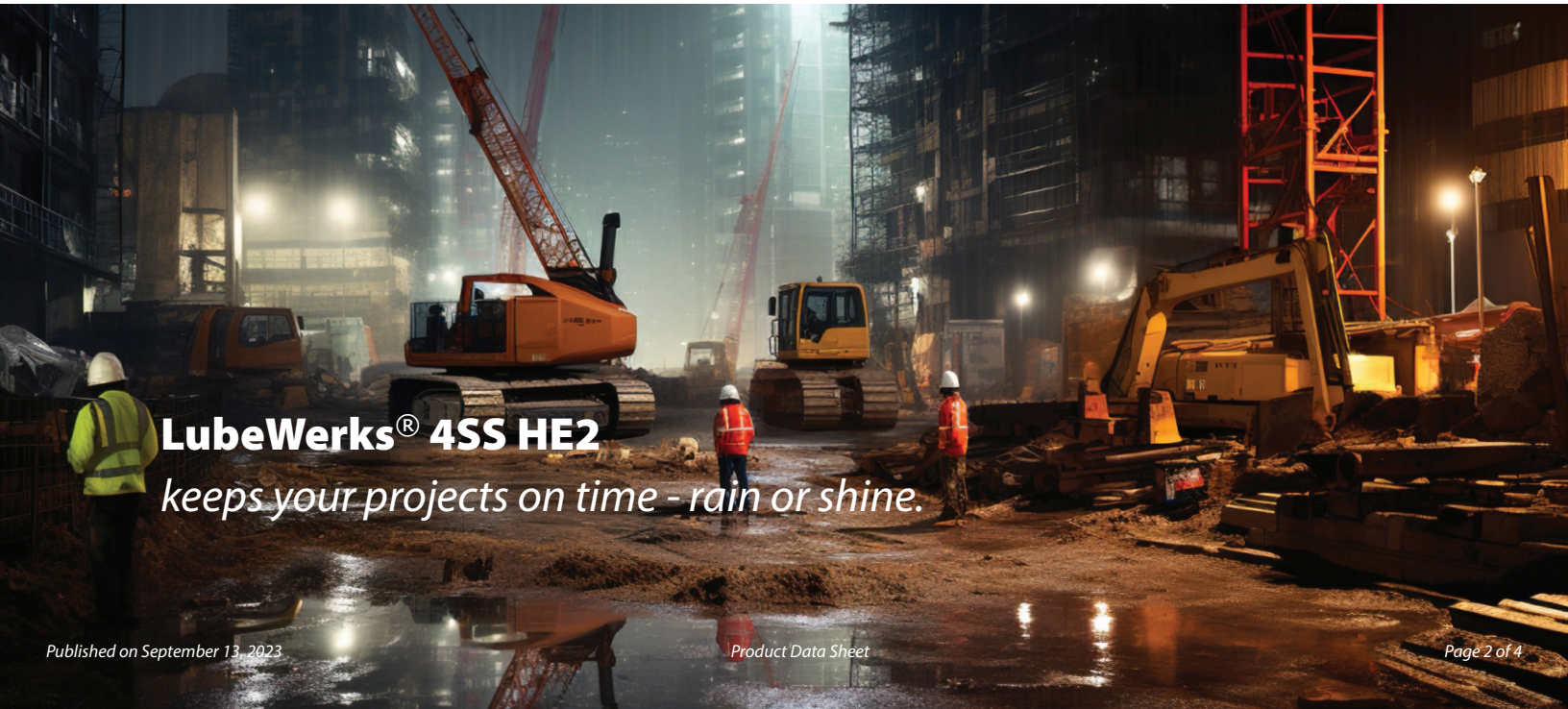
LubeWerks® T5 0W-40 Synthetic Blend Technology works even harder than new CK-4 specifications require and is proven to provide excellent performance across API CK-4 wear tests, delivering an average of 37% better than the maximum wear requirements.

APPLICATIONS AND CREDENTIALS

Product Performance	Recommended Treat Rate of LubeWerks CV1500 SB
	100.00% by weight
API CK-4	L
CAT ECF-3	A
Cummins CES 20086	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.

¹ - 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)



LubeWerks® 4SS HE2
keeps your projects on time - rain or shine.

FEATURES AND BENEFITS

- Key industry OEM claims empower you to go to market with confidence.
- Low-viscosity formulations enable you to market innovative solutions for more modern commercial fleets.
- Proven performance, backed by rigorous testing, demonstrates exceptional wear protection and provides peace of mind.

TYPICAL CHARACTERISTICS²

Characteristic	Typical Value	Unit	Method
Physical State	Liquid	-	-
Form	Liquid	-	-
Color/Appearance	Amber	-	-
Odor		-	-
CALCIUM	0.129	%	LZ Test Method
NITROGEN	0.16	%	ASTM D 4629
PHOSPHORUS	0.11	%	LZ Test Method
SULFATED ASH	1	%	ASTM D 874
SULFUR	0.3	%	LZ Test Method
ZINC	0.12	%	LZ Test Method
BASE NUMBER (mgKOH/g)	10.2	NeutNo	LZ Test Method
FLASH POINT, C, COC	226	°C	ASTM D 92
FLASH POINT, C, PMCC	192	°C	ASTM D 93
LBS PER GAL @ 15.6 C	7.03	lbs	CALCULATED
POUR POINT, C	-57	°C	ASTM D 5950
SPECIFIC GRAVITY @ 15.6 C	0.844	SPGRAV	ASTM D 4052
VISCOSITY @ 100 C, CST	14.4	CST	ASTM D 445
VISCOSITY @ 40 C, CST	86	CST	ASTM D 445

²Not a manufacturing specification



LubeWerks® 4SS HE2
gets it done right - every time!

Fire and Explosion Hazard Data			
	Flash Point (method)	Classification	
	192°C PMCC	N/A	
Temperature Recommendations			
Unloading			
	Pumping Temperature	Ambient	
	Maximum Temperature *	70°C	158°F
Storage			
Maximum Temperature for Long-term Storage		45°C	113°F
Blending			
Maximum Base Oil Temperature for Mechanical or in-line Mixing		70°C	158°F
Equipment Recommendations			
Type of Pump	Positive Displacement		
Type of Transfer Line	Ball Launched, Insulated,Steam Traced Using 107°C/225°F Steam Max.		
Transfer Line Size	2-3inch/5-8 cm.		
Heat Source			
Type	Steam 107°C/225°F Max.		
Storage Tank			

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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