



## Product Data Sheet

# MS-X Plus Synthetic Blend 15W-40 Synthetic Blend Heavy Duty Diesel Engine Oil

### Description

Nemco's MS-X Plus Synthetic Blend 15W-40 Heavy Duty Diesel Engine Oil is API CK-4 approved engine oil formulated with an advanced blend of high VI mineral and synthetic (PAO) base oils and a select mixture of high-performance additives. It was developed for use in four-stroke diesel engines that meet 2017 model year on-highway and Tier 4 non-road exhaust emission standards, as well as for previous model year engines. This new synthetic blend formulation is designed to protect and sustain engine exhaust after-treatment devices such as diesel particulate filters (DPFs), diesel oxidation catalysts (DOCs) and selective catalytic reduction (SCR) systems.

Nemco's Heavy Duty Synthetic Blend SAE 15W-40 Diesel Engine Oil is backward serviceable for use in pre-2017 diesel engines, and may be used in equipment that called for earlier API oil categories CJ-4, CI-4 with CI-4 Plus, and CH-4. This oil offers the end user improved performance and longer equipment life in fleet, construction, and agriculture equipment under the most extreme conditions and provides optimum fuel economy, oil consumption control, low temperature pour point and start up.

### Advantages

- 🔥 Improved oxidative stability for longer service life
- 🔥 Excellent resistance to viscosity loss due to shear and oil aeration
- 🔥 Protection against catalyst poisoning, particulate filter blocking, engine wear, piston deposits
- 🔥 Protection for newer low-emission diesel engines and older diesel engines
- 🔥 Specially formulated to protect exhaust after-treatment devices
- 🔥 Excellent soot control for protection against abrasive wear and soot-induced oil thickening
- 🔥 Protection against sludge, varnish formation, rust, bearing corrosion and wear
- 🔥 Good resistance to foaming and aeration

### Applications

On-highway diesel trucks equipped with EGR and exhaust after-treatment devices to meet 2017 emissions standards, older diesel equipment with conventional, non-EGR engines or ACERT engines, and off-highway construction, earth moving and mining equipment.

### Meets and/or Exceeds:

- Approved and licensed for API Service CK-4, CJ-4, CI-4 with CI-4 PLUS, CI-4, CH-4/SN
- ACEA E9-2012, E7-08/E9-08
- Allison C-4/3
- Caterpillar ECF-3, ECF-2
- Cummins CES20086, 81, 71, 72, 76, 77, 78
- Daimler Mercedes-Benz 228.3
- Detroit Diesel 93K222, 93K218, 7SE270
- Global DHD-1
- International (Navistar) diesel engines
- JASO DH-2
- MIL-L-2104E/F
- Mack EOS-4.5, EO-O Premium Plus, EO-N Premium Plus, EO-N Plus
- MAN M-3575
- MTU Type 2.1
- Renault RLD-4, RLD-3
- Volvo VDS-4.5, VDS-4/3
- Diesel engines manufactured by OEMs not listed above, where OEM specifies API CK-4 engine oil

## Typical physical characteristics – Heavy Duty Synthetic Blend Diesel Engine Oil

Properties	Method	MS-X Plus Synthetic Blend 15W-40	Super Blue Synthetic Blend 10W-30
API Service Categories		CK-4, CJ-4, CI-4 Plus, CI-4, CH-4	
Oil Type		Synthetic Blend	
Colour	Appearance	Amber	Blue
Kinematic Viscosity @40°C mm <sup>2</sup> /s	ASTM D445	113	82
Kinematic Viscosity @100°C mm <sup>2</sup> /s	ASTM D445	15.5	12.2
Viscosity Index	ASTM D2270	140	145
CCS Viscosity @°C	ASTM D5293	6,000@ -20	6,100@ -25
Sulphated Ash, % wt.	ASTM D874	<1.0	<1.0
Total Base Number mg KOH/g	ASTM D2896	10	10
Flash Point (CC), °C (°F)	ASTM D92	n/a	n/a
Pour Point, °C (°F)	ASTM D97	-36 (-33)	-41 (-43)
MRV-TP1, Viscosity, cP@°C	ASTM D4684	20,000@ -25	21,000@ -30

These characteristics are typical of current production, variations in these characteristics may occur.

## Availability and product codes

Pack size	4X4L case	20L pail	205L drum	1,000 tote/Bulk
MS-X Plus 15W-40	DMOSZ0004	DMOSZ0019	DMOSZ0034	DMOSZ0046
Super Blue 10W-30	DMORZ0019	DMORZ0046	DMORZ0085	DMORZ0132
Availability	Year round			

## Use and Storage

To get the best performance from your equipment ensure products meet or exceed manufacturing requirements. Lubricants typically have a shelf life of 5 years under ideal storage conditions. Keep drums and totes in good condition and away from moisture. Keep bungs securely in place; as bungs breath, moisture can seep in over time. Where possible, avoid storage in areas where the temperature fluctuates between extreme highs and lows.

## Health, Safety, &amp; Environment

GHS compliant Safety Data Sheets are available at [nemco.ca](http://nemco.ca) under 'Safety Data Sheets'. For SDS in French, please contact [info@nemco.ca](mailto:info@nemco.ca). While this material is not considered hazardous the SDS contains valuable information critical to the safe handling and proper use of the product. Always take used oil to an authorized collection point. Avoid discharge into drains, soil, or water. As with any lubricant, keep out of reach of children and animals.

## Quality

Nemco works with respected industry suppliers and is an active member of ILMA. Nemco Resources Limited manufacturing facility in Winnipeg, Manitoba is proud to be certified to ISO 9001. For questions regarding quality, please contact our Technical Sales representatives.