

## Diesel Supreme Plus

### *Heavy Duty Diesel Engine Oils*

**Diesel Supreme Plus** oils contain the same high quality base stocks and performance additive found in the multi-weight oils. The SAE 10 may be used where API-CF oil is recommended while the SAE 20 can be used for the CF/SJ service. The SAE 30, 40 and 50 grades meet the requirements of the medium and heavy-duty diesel as well as the two stroke engine. They are suited for the applications where high performance API CF-2, CF, CE, CD-II, CD, SG and SH (except 10W) or SJ service is required. They may be used in some LPG, CNG and alternate fuel engine applications.

**Diesel Supreme Plus** oils are suitable for use in both gasoline and diesel service making them applicable to mixed fleets in “on-and-off road” use. Specific viscosity grades are approved for use in power-shift, manual and hydrostatic transmissions, as well as final drives and hydraulic systems where the use of a heavy-duty detergent type engine oil is recommended.

#### Product Features:

- Excellent corrosion protection for all internal
- Excellent rust protection
- Enhanced engine life by decreasing mechanical wear

#### Customer Benefits:

- Controls low temperature sludge deposits for cleaner engines while extending pump life in various pressure circulating systems.
- Reduces ring sticking and wear by controlling the formation of high temperature varnish while also being foam inhibited to assure smooth and efficient machine operation
- Minimizes valve and combustion chamber deposits
- Provides protection against the formation of acids caused by oxidation or fuel
- Lessens formation of PCV valve deposits in gasoline engines
- Contains anti-wear agents to enhance engine life

#### Meets or Exceeds Specifications:

CAT ECF-1-a	ACEA E2-96 Issue 5 (2007)	Cummins CES 20071
Mack EO-M Plus	Cummins CES 200676	MB-Approval 228.1
ACEA A2-96 Issue 3 (2002)	Cummins CES 20072	MAN 271
MTU Type 1	Volvo VDS-2	





# Product Data Sheet



## Typical Properties

### Diesel Supreme Plus Monograde

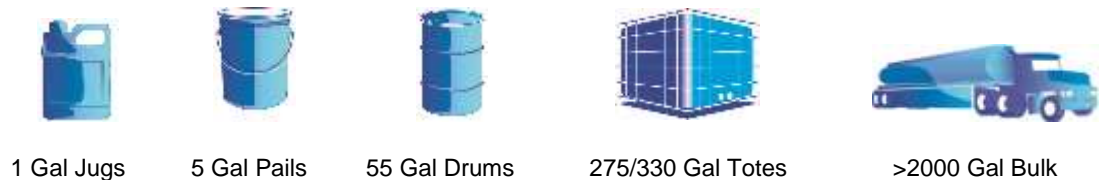
Product Number	101	102	103	104	105	Test Method
SAE Grade	10	20	30	40	50	-
API	30.37	29.05	28.11	27.47	27.52	-
Specific Gravity	0.8742	0.8813	0.8866	0.8901	0.8898	ASTM D4052
Lbs/Gal	7.28	7.34	7.38	7.41	7.41	-
Density	0.8737	0.8809	0.8861	0.8896	0.8893	-
Flash Point °C	190	207	221	236	237	ASTM D92
Pour Point °C	-27	-24	-21	-18	-21	ASTM D97
Color	<7.5	<7.5	<7.5	<7.5	<7.5	ASTM D1500
Viscosity						
@100°C cSt	6.307	8.355	11.4	14.65	18.57	ASTM D445
@40°C cSt	38.11	59.52	96.2	178.3	199.3	
Viscosity Index	114	111	106	104	103	ASTM D2270

These properties are typical of the current production. Variations that do not affect product performance are to be expected depending on blending and manufacturing locations. The information container herein is subject to change without notice.

#### Health and Safety:

This product is unlikely to have any adverse health implications or safety hazards when used for its intended application. Avoid contact with skin, use resistant gloves when handling used oil. If skin comes in contact wash immediately with soap and water. For complete information on safe handling and product characteristics please refer to the Material Safety Data Sheet (MSDS) found on our website. [www.royalmfg.com](http://www.royalmfg.com) or call (918)-584-2671.

#### Packaging Options:



1 Gal Jugs

5 Gal Pails

55 Gal Drums

275/330 Gal Totes

>2000 Gal Bulk

