

Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline™ All-Fleet Plus™ Engine Oil

Valvoline™ All-Fleet Plus™ Engine Oils are formulated to provide optimum performance in modern, emissions treatment equipped diesel engines operating under a wide variety of service conditions, including engines with diesel particulate filters (DPF) and cooled exhaust gas recirculation (EGR). They are blended with premium basestocks and high quality additive chemistry to achieve the following benefits: high temperature piston deposit control, foam protection, soot dispersancy and oil-thickening control, oxidation inhibition, low temperature sludge protection, corrosion and rust inhibition, valve train wear protection and TBN retention.

Valvoline™ All-Fleet Plus™ Engine Oils are recommended for use in turbocharged and naturally aspirated two and four cycle diesel engines. They may also be used in gasoline engines for the "mixed fleet" operator. These motor oils provide excellent performance in local stop and go routes, on-and off-highway, farm, construction, and mining applications. All Fleet Plus meets all the requirements for Tier IV engines and is backwards compatible with Tier III.

Approvals/Formulated to Meet Performance

| | | | | | | | |
|----------------------------|----------|----------|------|-----|-----|-----|-----|
| API CJ-4, CI-4, CH-4, CG-4 | 15W-40 | 10W-30 | | | | | |
| API CF | 15W-40 | 10W-30 | 10W | 20W | 30 | 40 | 50 |
| API CF-2 | | | 10W | 20W | 30 | 40 | 50 |
| API SM | 15W-40 | 10W-30 | | | | | |
| API SF | | | | | 30 | 40 | 50 |
| ACEA E9/E7-08 | 15W-40 | | | | | | |
| CATERPILLAR | 15W-40# | 10W-30# | | | | | |
| CUMMINS (CES 20081/20078) | 15W-40## | 10W-30## | | | | | |
| DETROIT DIESEL | 15W-40** | | | | 30* | 40* | 50* |
| DEUTZ DQC III-10 LA | 15W-40^ | | | | | | |
| MACK EO-O PP-07 | 15W40 | 10W-30 | | | | | |
| MB p228.31 | 15W-40^ | | | | | | |
| NAVISTAR | 15W-40 | | | | | | |
| ALLISON C-4 | 15W-40^ | | 10W^ | | 30^ | | |
| VOLVO VDS-4 | 15W-40 | 10W-30 | | | | | |
| Global DHD-1 | 15W-40^^ | 10W-30^^ | | | | | |
| JASO DH-2 | 15W-40^^ | 10W-30^^ | | | | | |

| Typical Properties | 15W-40 | 10W-30 | 10W | 20W | 30 | 40 | 50 |
|------------------------------|----------|----------|----------|----------|-------|-------|-------|
| Gravity, degree API | 29.5 | 31.1 | 31.5 | 30.4 | 29.7 | 29.3 | 27.8 |
| Specific Gravity, 15 C | 0.879 | 0.870 | 0.868 | 0.874 | 0.878 | 0.880 | 0.888 |
| Viscosity @ 40 C, cSt | 117 | 80 | 37 | 52 | 87 | 138 | 204 |
| Viscosity @ 100 C, cSt | 15.2 | 11.9 | 6.4 | 8.0 | 11.0 | 14.6 | 20.0 |
| Viscosity Index | 135 | 143 | 122 | 122 | 113 | 105 | 113 |
| CCS Viscosity, cP | 6600@-20 | 6600@-25 | 6800@-25 | 8000@-15 | ----- | ----- | ----- |
| HTHS Viscosity, cP | 4.2 | 3.5 | ----- | ----- | 3.7 | >3.7 | >3.7 |
| Borderline Pumping Viscosity | Pass | Pass | Pass | Pass | ----- | ----- | ----- |
| Pour Point, deg. C | -30 | -33 | -36 | -30 | -24 | -21 | -18 |
| Total Base Number (D-2896) | 9 | 10 | 7 | 7 | 7 | 7 | 7 |
| Sulfated Ash, % | 1.0 | 1.0 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Zinc, wt % | 0.127 | 0.127 | 0.126 | 0.126 | 0.126 | 0.126 | 0.126 |

Part Numbers

| | | | | | | | |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|
| Bulk | VV3850 | VV3820 | VV3900 | VV3920 | VV3930 | VV3980 | VV4010 |
| Tote | 852824 | 853212 | 841599 | | 841622 | 841623 | 844139 |
| 55 Gallon Drum | VV385 | VV382 | VV390 | | VV393 | VV398 | VV401 |
| 5 Gallon Plastic Pail | VV386 | | VV391 | | VV395 | VV400 | |
| 1 Gallon Jug | 773634 | | | | 773635 | | |
| 12/1 Quart | VV388 | | | | VV396 | | |

* Two-Stroke engines only.

** Approved for DDC 93K218 (Detroit Diesel recommends this viscosity grade only for their four-cycle engines.)

Meets Caterpillar ECF-3 and older Specification Requirements

Meets the engine performance requirements of CES 20078. Is approved against CES 20081.

^ Meets the performance requirements of

^^ Meets engine performance requirements of

ASHLAND

Refer to Valvoline's Material Safety Data Sheet for health and safety instructions.

This information only applies to products manufactured in the following location(s): USA. Canada

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| Effective Date: | Expiration Date: | Replaces: | Author's Initials: | Pages | Code |
| 08/04/2014 | N/A | 07/31/14 | JF | 2 | AFP1402 |