



PRODUCT BULLETIN

Blue Blood Break in Oil

High Zinc Formula

PRODUCT #631

The CAM2 Racing Heritage goes back to 1966 and the successful Roger Penske/Sunoco Racing program. The award winning CAM2 chemistry in the 20W-50 formula was developed as a three-way venture between Sunoco, General Motors and Penske racing. Using CAM2 racing motor oils race teams competed and won in Trans Am, Can Am, CART Championship (Indy Cars) and NASCAR. Using CAM2 motor oils Penske Racing won at Indy on three occasions with Rick Mears and Bobby Unser. CAM2 racing motor oil was the first multi-viscosity oil to win at Indy.

Today, World class racers like Stone Crusher of Monster Truck series, John Bojec of Speed City Performance, and Kevin Mayer's Pirate Ship PRO-MOD Willys use **High Zinc CAM2 Blue Blood Racing Motor Oils, Gear Oils, Grease and Transmission Fluids** because they know they can depend on CAM2's race proven performance oils for maximum protection under even the most extreme high load and pressure conditions.

CAM2 BLUE BLOOD RACING OILS are available in 3 multi-viscosity grades. The 0W-30 is a Full Synthetic formulation. The 10W-30 and 20W-50 are formulated in combination with synthetic base oil to provide enhanced protection at high and low temperature extremes. SAE 50 and "Nitro" SAE 70 are specifically formulated for gas, alcohol and nitro-methane fueled racing engines that experience extreme load and high temperature conditions. The high viscosity of the oil allows for excessive dumping of fuel "blow by" into the racing oil while maintaining critical protection.

CAM2 Hi-Performance Break-In Oil has a high level of performance additives to insure excellent anti-wear performance and protection during the initial start up and break in of new engines. This highly increased amount of zinc, phosphorus and sulfur chemistries is formulated to facilitate optimal ring seal and protect rotating assembly components such as the camshaft and valve train from initial start up wear. **CAM2 Hi-Performance Break-In Oil** optimizes the anti-wear protection required in flat-tappet and roller engines. Additionally, maximum compression is provided along with maximum horsepower being generated. Our proprietary formula requires no additional additives.

FEATURES

- High Zinc levels for Excellent Anti-Wear Protection
- 0W-30 is a Full Synthetic Racing Oil
- 10W-30 and 20W-50 Racing Oils are Synthetic Blends
- Top of the line shear stable VI improvers, for stay in grade performance.
- Excellent oxidation stability in high performance engines
- Break-In Oil for optimal start-up protection

See Technical Data on pg 2.



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TECHNICAL DATA

| SAE GRADE | Test Method | 0W-30 | 10W-30 | 20W-50 | NITRO 70 | SAE 50 | Break-In |
|---------------------------|--------------|------------------|------------------|------------------|----------|-----------|------------------|
| Product Code | | 675 | 676 | 677 | 678 | 600 | 631 |
| API Gravity, 60° F | ASTM D-1298A | 33.1 | 31.5 | 30.2 | 27.1 | 27.2 | 30.9 |
| Specific gravity | Calculated | 0.86 | 0.868 | 0.875 | 0.892 | 0.891 | 0.871 |
| Viscosity, cSt @ 40°C | ASTM D-445 | 53.8 | 76.8 | 150 | 360 | 227.7 | 94.89 |
| cSt @ 100°C | ASTM D-445 | 10 | 11.88 | 19.25 | 28.3 | 20.03 | 13.29 |
| Viscosity, SUS @ 100°F | ASTM D-2161 | 270 | 370 | 730 | 1,760 | 1055 | 440 |
| Viscosity, SUS @ 210°F | ASTM D-2161 | 59.5 | 66.8 | 101 | 138 | 98.6 | 71.3 |
| Viscosity Index | ASTM D-2270 | 173 | 150 | 146 | 107 | 101 | 140 |
| CCS, cP | ASTM D-5293 | 5,800 @ (-35°C) | 5,950 @ (-25°C) | 6,400 @ (-15°C) | N/A | N/A | 5,100 @ (-20°C) |
| MRV, cP | ASTM D-4598 | 22,500 @ (-40°C) | 40,800 @ (-30°C) | 36,500 @ (-20°C) | N/A | NA | 40,000 @ (-25°C) |
| HTHS @ 150°C, | ASTM D-4683 | 3.38 | 3.54 | 6.2 | N/A | > 3.7 | > 3.7 |
| Pour Point, °F (°C) | ASTM 5949 | -60 (-51) | -44 (-42) (max) | -33 (-36) | 21 (-6) | -18 | -39 |
| Flash Point, COC, °F (°C) | ASTM D-92 | 385 (196) | 400 (204) | 420 (216) | 548° F | 420 (216) | 400 (204) |
| Calcium, ppm | ASTM D-6481 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 500 |
| Zinc, ppm | ASTM D-6481 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 3,400 |
| Phosphorous, ppm | ASTM D-6481 | 1,800 | 1,800 | 1,800 | 1,800 | 1,800 | 3,100 |
| Color | ASTM D-1500 | Blue | Blue | Blue | Blue | Blue | Blue |
| TBN | ASTM D-2896 | 9 | 10.6 | 10.6 | 9.5 | 10.6 | N/A |
| Sulfated Ash, mass % | ASTM D-874 | 1.2 | 1.2 | 1.2 | 1 | N/A | N/A |
| Sulfur, ppm | | 4,000 | 4,000 | 4,000 | 5,000 | 4,000 | 11,500 |

Contact your CAM2 representative or CAM2 distributor for additional information.

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