

## FULL SYNTHETIC MOTOR OIL

Sinclair Full Synthetic Motor Oils are the ultimate in advanced oil technology. Blended from 100% synthetically hydroprocessed North American base stocks, these oils exceed tough U.S standards for high levels of advanced protection and performance in today's harder working, hotter running gasoline engines. They contain specially designed, technologically advanced, rigorously tested, and field proven additive systems providing unsurpassed performance. These very high quality synthetic formulas provide enhanced engine protection longer than conventional motor oils. Sinclair Full Synthetic SAE 5W-20 and & 10W-30 Motor Oils carry the ILSAC GF-5 Certification Mark that meet API Resource Conserving requirements.



## **APPLICATIONS**

- Where API Performance Category SN, SM, SL, SJ, SH, SG, SF, or SE oils are recommended.
- In passenger car, SUV and light truck engines that require oils showing the ILSAC GF-5 Certification Mark (SAE 5W-20 and SAE 10W-30).
- In all turbocharged gasoline engines.
- In larger gasoline engines used in severe service, such as towing trailers, campers, racing, etc.
- In older gasoline powered passenger car engines.

Sinclair Arctic Fire Full Synthetic Motor Oils are licensed by the API for the SN Classification under the new CMA Code of Practice (5W-20 and 10W-30). This classification assures only the highest quality.

### **PERFORMANCE**

- Provides fast starting and quick oil pump ability
- Maintains viscosity over a wide range of temperatures and maintains grade through the recommended drain interval.
- Provides wear protection, deposit control, reduced starting friction
- Meets or exceeds Ford specification WSS-M2C929A and WSS-M2C930A
- Meets or exceeds General Motors specification 6094M
- Meets or exceeds Chrysler specification MS-6395H
- Outstanding protection against viscosity and thermal breakdown
- Improved fuel economy

Sinclair Arctic Fire Full Synthetic Motor Oils Meet API SN, SM and SL, ILSAC GF-5



# FULL SYNTHETIC MOTOR OIL

### TYPICAL PHYSICAL PROPERTIES

### **METHOD**

### **TYPICAL RESULTS**

| Viscosity Grade                                |                    | Full Synthetic 0W-20 | Full Synthetic 5W-30 | Full Synthetic 10W-30 |  |
|------------------------------------------------|--------------------|----------------------|----------------------|-----------------------|--|
| Gravity, °API                                  | ASTM D287          | 34.74                | 34.58                | 33.86                 |  |
| Specific Gravity @ 60°F (15.6°C)               | ASTM D4052         | 0.8512               | 0.8522               | 0.8557                |  |
| Viscosity @ 40°C cSt                           | ASTM D445          | 42.31                | 49.86                | 61.71                 |  |
| Viscosity @ 100°C cSt                          | ASTM D445          | 8.06                 | 8.918                | 10.14                 |  |
| Viscosity Index                                | ASTM D2270         | 167                  | 160                  | 151                   |  |
| High Temperature / High Shear Vis at 100°C, cP | ASTM D6616         | 5.87                 | 6.14                 | 7.17                  |  |
| High Temperature / High Shear Vis at 150°C, cP | ASTM D4683         | 2.65                 | 2.67                 | 3.04                  |  |
| Noack Volatility, % loss                       | ASTM D5800         | 13.9                 | 11.7                 | 8.2                   |  |
| Color                                          | ASTM D1500         | 2.5                  | 3                    | 3                     |  |
| Zinc, wt. %                                    | ASTM D5185         | 0.085                | 0.085                | 0.085                 |  |
| Phosphorus, wt. %                              | ASTM D5185         | 0.077                | 0.077                | 0.077                 |  |
| Calcium, wt. %                                 | ASTM D5185         | 0.214                | 0.19                 | 0.19                  |  |
| Sulfur, wt. %                                  | ASTM D4951         | 0.333                | 0.3                  | 0.3                   |  |
| Boron, wt. %                                   | ASTM D5185         | 0.023                | 0.018                | 0.018                 |  |
| Molybdenum, wt. %                              | ASTM D5185         | 0.0079               | 0.004                | 0.004                 |  |
| Sulfated Ash, wt. %                            | ASTM D874          | 0.92                 | 0.92                 | 0.92                  |  |
| Nitrogen, wt. %                                | ASTM D4629         | 0.102                | 0.084                | 0.084                 |  |
| Pumping Viscosity at (°C), cP                  | ASTM D4684         | 13,687 (-40)         | 12,500 (-35)         | 13,900 (-30)          |  |
| Shear Stability                                | ASTM D6278         | 7.78                 | 7.8                  | 8.99                  |  |
| Foam Seq. I (Tendency/Stability), mL           | ASTM D892 (Opt. A) | 0/0                  | 0/0                  | 0/0                   |  |
| Foam Seq. II (Tendency/Stability), mL          | ASTM D892 (Opt. A) | 0/0                  | 0/0                  | 0/0                   |  |
| Foam Seq. III (Tendency/Stability), mL         | ASTM D892 (Opt. A) | 0/0                  | 0/0 0/0              |                       |  |
| High Temperature Foaming, static foam          | ASTM D6082 (Opt A) | 40/0                 | 10/0                 | 20/0                  |  |
| Copper Strip Corrosion (3 hrs@100°C)           | ASTM D130          | 0                    | 0                    | 1a                    |  |
| TBN, mgKOH/g                                   | ASTM D2896         | 7.9                  | 7                    | 7                     |  |

| Description                        | Pack Size  | Part #  | Each UPC        | Case UPC        | Case Dimensions                   | Case Cube /<br>Pallet Cube | Case Weight /<br>Pallet Weight | Pallet Stack                  |
|------------------------------------|------------|---------|-----------------|-----------------|-----------------------------------|----------------------------|--------------------------------|-------------------------------|
| Full Synthetic<br>Motor Oil OW-20  | 6/1 Quart  | 848-006 | 0 14168-01752 7 | 0 14168-01767 1 | L 9.500 x W 7.625 x<br>H 9.625    | 0.403 / 68.194             | 12.170 /<br>1899.100           | 156 Cases<br>(6 layers of 26) |
| Full Synthetic<br>Motor Oil OW-20  | 55 Gallon  | 848-003 | 0 14168-01755 8 | N/A             | L 23.000 x W 23.000 x<br>H 35.000 | 10.715 / 44.444            | 455.741 /<br>1822.965          | 4 Drums                       |
| Full Synthetic<br>Motor Oil OW-20  | 330 Gallon | 848-002 | N/A             | N/A             | L 48.000 x W 48.000 x<br>H 49.000 | 65.333 / 65.333            | 2,349.270 /<br>2349.270        | 1 Tote                        |
| Full Synthetic<br>Motor Oil 5W-20  | 55 Gallon  | 504-003 | 0 14168-01761 9 | N/A             | L 23.000 x W 23.000 x<br>H 35.000 | 10.715 / 44.444            | 440.515 /<br>1762.059          | 4 Drums                       |
| Full Synthetic<br>Motor Oil 10W-30 | 6/1 Quart  | 519-006 | 0 14168-01605 6 | 0 14168-01766 4 | L 9.500 x W 7.625 x<br>H 9.625    | 0.403 / 68.194             | 12.250 /<br>1911.200           | 156 Cases<br>(6 layers of 26) |





