

PennGrade 1 Monograde High Performance Oils



Product Description

PENNGRADE 1® Monograde High Performance Oils are specially formulated using high quality PENNGRADE base stocks and select additive technologies to meet the stringent lubricating demands of high-performance, highly stressed, street and racing engines.

PENNGRADE 1® Monograde High Performance Oils deliver excellent shock load and high temperature protection to heavily stressed engine parts including bearings, camshafts, rings, and pistons. They reduce internal friction for increased horsepower output while maintaining their strong lubricating film protection even under the most demanding torque and extreme temperature conditions. These high performance formulations also possess good anti-foaming and shear stability characteristics, and offer excellent high temperature protection from thermal breakdown as well as strong anti-wear properties.

PENNGRADE 1® Monograde High Performance Oils have a distinct green color and are available in four monograde viscosities to meet virtually all lubricating requirements of high performance street and racing engines. The SAE 30, SAE 40, SAE 50, SAE 60 and "Nitro" 70 products are suitable for use in most naturally aspirated, turbocharged, or supercharged gasoline engines.

PENNGRADE 1® SAE 30 and 40 Monograde High Performance Oils offer a typical TBN of 9.5 and 10.6 (SAE 30). They are fortified with an anti-wear agent proven to be highly effective in the regime of extremely stressed engines.

PENNGRADE 1® "Nitro" 70 Monograde High Performance Oil is specifically formulated for gas, alcohol, and nitromethane fueled engines that experience extreme torque, load, and high temperature conditions. The PENNGRADE 1® SAE 50 and SAE 60 are suitable for use in gas, alcohol, and nitromethane fueled engines where these viscosities are desired. The initial high viscosity of these oils allows excessive dumping of fuel ("blow by") into the lubricating fluid while maintaining critical protection for expensive, high performance racing engines and their components. Additionally, the SAE 60 is ideally suited for the heavier viscosity lubrication needs of the early classic motorcycles/engines like Harley Davidson® (Flathead®, Knucklehead®, Panhead®, Shovelhead®, etc.) and others. Always consult owner's manual for proper oil viscosity and quality selection.



PennGrade 1 Monograde High Performance Oils



The following manufacturers endorse PENNGRADE 1® High Performance Oils:

- Koerner Racing Cams Tucson, AZ www.koernerracing.com
- Cam Motion, Inc. Baton Rouge, LA www.cammotion.com
- Howard Cams Oshkosh, WI www.howardscams.com
- Schneider Racing Cams San Diego, CA www.schneidercams.com
- Crower Cams San Diego, CA www.crower.com
- Crane Cams Daytona Beach, FL www.cranecams.com

Typical Properties

SAE Grade	Test Method	30	40	50	60	70 "Nitro"
Gravity, API	ASTM D-4052	28	27.5	26.8	26.2	26.7
Density, lbs/gal (g/L)	Calculated	7.40 (887)	7.41 (888)	7.44 (891)	7.485 (897)	7.45 (892)
Viscosity, cSt @ 40°C	ASTM D-445	97	150	218.5	274.4	314.8
Viscosity, cSt @ 100°C	ASTM D-445	11.65	15.5	20	23.3	28
Viscosity Index	ASTM D-2270	118	108	106	105	114
Pour Point, °F (°C)	ASTM D-5949	-22 (-30)	0 (-18)	5 (-15)	5 (-15)	20 (-6)
Flash Point, COC, °F (°C)	ASTM D-92	425 (218)	425 (218)	440 (227)	425 (218)	450 (232)
Zinc, Mass %	ASTM D-6481	0.15	0.15	0.15	0.15	0.15
Phosphorous	ASTM D-6481	0.14	0.14	0.14	0.14	0.14
Color	ASTM D-1500	Green	Green	Green	Green	Green
TBN	ASTM D-974	10.6	9.5	9.45	9.45	9.45
Sulfated Ash, mass %	ASTM D-874	1.2	1	1	1	1
Product Code	55 Gal Drum	BPL601-7139	BPL601-7140	BPL601-7115	BPL601-7116	BPL601-7117
	12/1 Qt, Net 3 Gal	BPL009-7139	BPL009-7140	BPL009-7115	BPL009-7116	BPL009-7117