

PennGrade 1 Multi-Grade High Performance Oils



Product Description

PENNGRADE 1® Multi-Grade 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® Multi-Grade 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 provide good anti-foaming and shear stability characteristics, excellent high temperature protection from thermal breakdown, outstanding film strength, and strong antiwear properties.

PENNGRADE 1® Multi-Grade High Performance Oils have a distinct green color and are available in six multi-grade viscosities to meet virtually all lubricating requirements of high performance street and racing engines. The Partial Synthetic SAE 0W-30 is a low viscosity oil tailored to maximize horsepower in engines that use this type of engine oil. The Partial Synthetic SAE 5W-30 is ideally suited in today's street*/racing market 'crate engines' that require this viscosity. Both the 0W-30 and 5W-30 contain strong detergent, dispersant and ZDDP anti-wear additives to help protect critical engine parts.

PENNGRADE 1® Multi-Grade High Performance Oils Partial Synthetic SAE 10W-30, 10W-40, 15W-40 and SAE 20W-50 are formulated with a typical TBN of 10.6 to provide a high level of detergency for protection against bearing corrosion and piston deposits in both turbocharged and non-turbocharged engines. These engine oils provide outstanding "heavy load" bearing protection on heavily stressed engine parts. The synthetic component of these engine oils enhances the protection afforded at high and low temperature extremes. The 10W-30, 10W-40, 15W-40 and 20W-50 also contain strong dispersant and ZDDP anti-wear additives to protect critical engine parts.

* Not recommended for use in vehicles equipped with catalytic converters

D-A Lubricant Company, Inc.
801 Edwards Drive
Lebanon, IN 46052 USA
www.penngrade1.com sales@bradpenn.com
1-866-661-5703 Fax: 1-317-941-6548



PennGrade 1 Multi-Grade 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.howardcams.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	0W-30	5W-30	10W-30	10W-40	15W-40	20W-50
Gravity, API	ASTM D-4052	35.6	33	30	30.9	29.8	29
Density, lbs/gal (g/L)	Calculated	7.05 (845)	7.16 (858)	7.30 (875)	7.27	7.32	7.341 (880)
Viscosity, cSt @ 40°C	ASTM D-445	63.5	65.6	68.6	109	113	159
Viscosity, cSt @ 100°C	ASTM D-445	11	11.1	10.8	15.6	15.5	20
Viscosity Index	ASTM D-2270	170	161	138	154	145	140
CCS, cP	ASTM D-5293	6,000 @ (-35°C)	6,200 @ (-30°C)	6,500 @ (-25°C)	6,300 @ (-25°C)	5050 @ (-20°C)	4,600 @ (-15°C)
MRV, cP	ASTM D-4684	20,600 @ (-40°C)	24,000 @ (-35°C)	26,700 @ (-30°C)	28,150 @ (-30°C)	21,175 @ (-25°C)	35,700 @ (-20°C)
HTHS @ 150°C, cP	ASTM D-4683	3.38	3.185	3.54	4.23	4.52	6.2
Pour Point, °F (°C)	ASTM D-5949	-54 [-48]	-43.6 [-42]	-27 [-33] (max)	-43.6 [-42]	-43.6 [-42]	-16.6 [-27] (max)
Flash Point, COC, °F (°C)	ASTM D-92	385 (196)	395 (202)	400 (204)	400 (204)	400 (204)	420 (216)
Zinc, Mass %	ASTM D-6481	0.15	0.15	0.15	0.15	0.15	0.15
Phosphorous	ASTM D-6481	0.14	0.14	0.14	0.14	0.14	0.14
Color	ASTM D-1500	Green	Green	Green	Green	Green	Green
TBN	ASTM D-974	9	10.6	10.6	10.6	10.6	10.6
Sulfated Ash, mass %	ASTM D-874	1.2	1.2	1.2	1.2	1.2	1.2

Product Code	55 Gal Drum	BPL601-7126	BPL601-7109	BPL601-7150	BPL601-7144	BPL601-7158	BPL601-7119
	12/1 Qt, Net 3 Gal	BPL009-7126	BPL009-7109	BPL009-7150	BPL009-7144	BPL009-7158	BPL009-7119

D-A Lubricant Company, Inc.
 801 Edwards Drive; Lebanon, IN 46052 USA
www.penngrade1.com sales@bradpenn.com
 1-866-661-5703 Fax: 1-317-941-6548
 © 2015, D-A Lubricant Company, Inc.
 DA-PG1-HPMulti new 10/2015 Made in USA

