



# Product Bulletin

## LOW ASH STATIONARY GAS ENGINE OILS

**BRAD PENN<sup>®</sup> Low Ash Stationary Gas Engine Oils** are blended using select high quality paraffinic base oils and a unique additive system. The advanced additive technology employed in **BRAD PENN<sup>®</sup> Low Ash Stationary Gas Engine Oils** has been field tested in oils used to lubricate 4-stroke cycle gas engines in such rigorous applications as power generation and compression/transmission of natural gas. Oils formulated with this additive system have been proven to provide enhanced resistance to oxidation and nitration, increased anti-wear and corrosion protection, improved deposit control and resistance to foaming.

### **BRAD PENN<sup>®</sup> Low Ash Stationary Gas Engine Oils:**

- Utilize high quality paraffinic base oils for exceptional lubricity, film strength, low volatility and a high viscosity index
- Employ a proven, field tested additive system for superior engine protection and performance
- Offer excellent resistance to oxidation and nitration
- Protect against valve seat wear, cylinder and piston scuffing
- Provide improved deposit control and engine cleanliness
- Contribute to reduced maintenance costs and longer engine life
- Are compatible with engines using exhaust catalyst after-treatment (low phosphorous)
- Are available in three viscosity grades to satisfy a variety of needs and applications

**BRAD PENN<sup>®</sup> Low Ash Stationary Gas Engine Oils** are designed for use in naturally aspirated and turbocharged four-stroke cycle engines burning natural gas. They are especially recommended for use in Caterpillar 3500/3600 and Waukesha 7077/7042 series engines. They may also be used in engines manufactured by Dresser Rand, Cooper-Superior, Cooper-Bessemer, Wartsila, Worthington and others where a low-ash gas engine oil is specified. Always follow equipment manufacturers' recommendations for appropriate applications and viscosity grade.



**AMERICAN REFINING GROUP, INC.**

77 North Kendall Avenue • Bradford, Pennsylvania • 16701  
Phone: 814.368.1200 • Fax 814.368.1219 • [www.amref.com](http://www.amref.com) • ISO 9001:2008

**BRAD PENN<sup>®</sup>**  
**Low Ash Stationary Gas Engine Oils – Typical Properties**

<b>SAE Grade</b>	<b>Test Method</b>	<b>15W-40</b>	<b>30</b>	<b>40</b>
API Gravity, 60°F	ASTM D-1298A	29.9	28.6	27.9
Density, lbs/gal (g/L)	Calculated	7.30 (875)	7.36 (882)	7.39 (886)
Viscosity, cSt @ 40°C	ASTM D-445	107.0	92.8	132
Viscosity, cSt @ 100°C	ASTM D-445	14.2	11.0	13.6
Viscosity, SUS @ 100°F	ASTM D-2161	525	490	690
Viscosity, SUS @ 210°F	ASTM D-2161	74.0	63.0	71
Viscosity Index	ASTM D-2270	132	102	98
CCS @ -20°C, cP	ASTM D-5293	6,300	N/A	N/A
MRV @ -25°C, cP	ASTM D-4684	26,000	N/A	N/A
Pour Point, °F (°C)	ASTM D-5949	-32.8 (-36)	-17 (-27)	0 (-18)
Flash Point, COC, °F (°C)	ASTM D-92	425 (218)	450 (232)	450 (232)
Color	ASTM D-1500	3.0	L 3.0	L 3.0
TBN	ASTM D-2896	5.2	5.2	5.2
Sulfated Ash, mass %	ASTM D-874	0.45	0.45	0.45
KF Moisture, ppm	ASTM D-6304	400 (Max.)	N/A	N/A
Phosphorus, mass %	Calculated	.032	.032	.032
<b>Product Code</b>		<b>7256</b>	<b>7257</b>	<b>7258</b>