BRAD PENN® **Product Bulletin**

PENN-GRADE™ CONCRETE FORM OILS

BRAD PENN® *PENN-GRADE*™ Concrete Form Oils are non-residual, non-staining, VOC compliant[1] lubricants specifically designed to prevent concrete build-up on wood and metal forms used in concrete construction. These light colored oils form a non-drying oily surface which acts to seal and separate forms from the concrete, facilitating easy removal and eliminating bugholes. These form oils resist water wash-off and add rust protection to metal forms. Field performance has demonstrated that these form oils actually have a cleansing effect on previously existing concrete residues.

BRAD PENN® *PENN-GRADE*™ Concrete Form Oils are formulated with virgin PENN-GRADE™ base oils and specially selected additives to impart excellent parting characteristics to concrete forms. These form oils have low pour points and contain the proper level of free fatty acid. This fatty acid reacts with the base in the concrete to neutralize and form a soap, while the remaining triglycerides act as a slip agent for the form. This formulation works very well in allowing both a physical and chemical release, as well as increasing the life of the forms. This product is free of kerosene, diesel fuel, fuel oils, waxes and resins and may be applied with a roller, brush or sprayer. For best results, these form oils should be applied to a clean, dry surface.

BRAD PENN® *PENN-GRADE*™ Concrete Form Oils are available in two viscosity grades: 65 SUS and 95 SUS. The 65 SUS form oil is well suited for year-round applications, whereas the 95 SUS form oil finds more use in warmer weather applications.

[1] VOC regulations vary with individual State requirements. BRAD PENN® PENN-GRADE™ Concrete Form Oil VOC data are provided in Typical Properties Table on the following page.

AMERICAN REFINING GROUP, INC.
77 North Kendall Avenue • Bradford, Pennsylvania • 16701
Phone: 814.368.1200 • Fax 814.368.1219 • www.amref.com • ISO 9001:2008

BRAD PENN®
PENN-GRADE™ Concrete Form Oils – Typical Properties

SUS Viscosity Grade		**65**	**95**
ISO Viscosity Grade	**Test Method**	10	22
Gravity, API	ASTM D-4052	35.2	33.0
Density, lbs/gal (g/L)	Calculated	7.08 (849)	7.18 (860)
Viscosity, cSt @ 40°C	ASTM D-445	10.7	22.0
Viscosity, cSt @ 100°C	ASTM D-445	2.8	4.2
Viscosity, SUS @ 100°F	ASTM D-2161	65	95
Viscosity, SUS @ 210°F	ASTM D-2161	35.7	40.4
Viscosity Index	ASTM D-2270	102	105.0
Pour Point, °F (ºC)	ASTM D-5949	-25 (-30)	-20 (-27)
Flash Point, COC, °F (ºC)	ASTM D-92	325 (163)	350 (176)
Color	ASTM D-1500	0.5	1.0
VOC, g/L	EPA Method 24	103	66
Product Code		**7705**	**7706**