



TECHNICAL DATA

STAAR Lubricants, LLC, 560 Myrtle Street, Reynoldsville, PA 15851
Phone 814-612-2077 web: www.itdoesthetrick.com

TRICK SHOT® MACHINIST DRILL & TAP CUTTING FLUID

Bio-based Trick Shot® Sustainable Products Machinist Drill & Tap Cutting Fluid can be used for all of your metal drilling, tapping, and cutting applications. Trick Shot® Machinist reduces friction for prolonged tool life, improves tool performance, helps eliminate tool chatter, and keeps tooling cooler. It is also 100% biodegradable, USDA Certified Biobased, non flammable, NSF-H1 food-grade approved, non-toxic, EAL-VGP qualified, CA Prop 65 compliant, and safe for the environment.

Product Applications:

Drilling and Tapping: Trick Shot® Machinist outperforms other machining lubricants in coefficient of friction and evaporation testing. For drilling and tapping applications on all metals, this translates to exceptionally cleaner cuts, less heat, and longer tool wear all while requiring less lubricant needing to be applied.

Sharpening and bending: Trick Shot® Machinist's low coefficient of friction and special viscosity also make it perfect for use with sharpening, grinding, and bending operations.

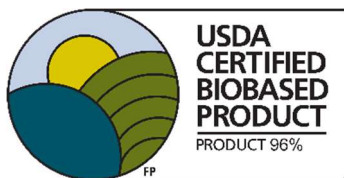
Non-Flammability Required Applications: Trick Shot® Machinist is safe for applications in proximity to welding, heating, and where electrical arcing may be present.

Safe for Environmentally Sensitive Applications: Trick Shot® is 100% biodegradable, non-toxic, and animal safe. Trick Shot® complies with CA Prop 65 and Environmentally Acceptable Lubricant/Vessel General Permit regulations for safety in groundwater and aquatic environments.

Foodsafe Industrial Lubricant: Trick Shot® Machinist is NSF-H1 registered as acceptable for incidental food contact for in and around food processing areas. This allows for use in installation and maintenance operations right on food processing factory floors and on farm equipment. Using TS® can also eliminate the need to fully sanitize final parts before shipping or placing into use.

USDA Certified Biobased: Trick Shot® Machinist has been registered with the USDA at 96% biobased Carbon content. This is a rare and unique quality that fits perfectly within yours and/or your customer's sustainability goals.

TYPICAL PROPERTIES AND TESTING STANDARDS ON NEXT PAGE

**NSF Registration*:**

Trick Shot ® Penetrating Lubricant, Category Code: H1
NSF Registration Number/Date: 159234/May 14, 2019

USDA Biopreferred Notification of Certification*:

Trick Shot ® Penetrating Lubricant, Application ID/Date: 8868/January 21, 2021

Safety Data Sheets (SDS)*:

Part Number TSMS8OZDPR, TSMS1GAL, TSMS5GAL, TSMS55GAL, TSMS275GAL (Liquid)

*SDS and Certification Letters available at: www.itdoesthetrick.com/downloads/

Ingredients:

Soy Oil Plus (soybean oil modified with proprietary/trade secret process)
Proprietary Thickeners, Solvent Dye (to aid visibility when in use)

Package Availability:

8 oz steel dropper can, 1 gal plastic jug, 5 gal plastic tote, 55 gal steel drum, 275 gal IBC tote

Country of Origin: United States of America

Typical Test Data:

Property	Test Method	Typical Result
USDA Bio-Preferred Program	ASTM D6866	96% Biobased
VOC Content	EPA 24	6.9 g/L (0.7%)
Density	ASTM D 4052	TBD
Weight Factor		TBD
Pour Point	ASTM D5950	26.6 Deg F
Flash Point	ASTM D92	371 Deg F
Distillation (Boiling Point)	ASTM D86	95% at 614.5 Deg F
Vapor Pressure	ASTM D323	1600 psi
Coefficient of Friction at 300 lbs	ASTM D3233B	0.0159
Coefficient of Friction at 1000 lbs	ASTM D3233B	0.0441
4 Ball Wear-Oil	ASTM D4172	0.68 mm Scar
Falex Pin & Vee EP Lube Direct Load, Ref Load	ASTM D3233A	1250 lbs, 1750 lbs
Kinematic Viscosity at 40C	ASTM D445	TBD
Kinematic Viscosity at 100C	ASTM D445	TBD
Viscosity Index	ASTM D2270	TBD
Dielectric Breakdown Voltage	ASTM D877	20.5 KV
pH at 25C	ASTM D1293	8.28
Rust Test - Deionized Water. 4 Hr Run Time	ASTM D665a	PASS
Rust Test - Synthetic Sea Water. 4 Hr Run Time	ASTM D665b	PASS