

FUNCTIONAL SGP-567

Saw Guide Oil Additive Package

APPLICATION:

FUNCTIONAL SGP-567 is designed for formulating saw guide oils in biobased or conventional base stock formulations. **FUNCTIONAL SGP-567** is a non-hazardous, multifunctional additive package intended for use in this highly specialized application. Saw Guide oils containing **FUNCTIONAL SGP-567** provide increased lubricity and excellent protection from rust on saw blades. **FUNCTIONAL SGP-567** is recommended for multi-blade saws, gang saws and trimmers used in lumber mill operations. While **FUNCTIONAL SGP-567** is compatible in biobased and mineral oil base stocks, performance is improved when biobased fluids are used.

COMPOSITION:

FUNCTIONAL SGP-567 is a combination of antiwear and EP additives, friction modifiers, demulsifiers, and rust inhibitors. The formulation does not contain sulfur, halogenated additives or heavy metals. When combined with a thickener and tackifier and formulated into a biobased fluid or mineral oil of suitable viscosity, **SGP-567** will function as a fully formulated saw guide lubricant. **FUNCTIONAL PD-585** is recommended for continuous operation in climates below -20°C for biobased lubricants. **FUNCTIONAL PD-610** is recommended in mineral oil formulations.

Typical Properties		
Appearance	Amber liquid	
Color (ASTM D1500)	1.5	
Odor	Mild	
Lbs. per Gallon	7.8	
Flash Point	370°F (188°C)	
Kinematic Viscosity at 40°C	50 cSt	
Phosphorous, wt.%	2.2	
Performance at 1.5% Wt.	Canola Oil	ISO 68 Mineral Oil
4-ball wear test (ASTM D4172) at 20 kg	0.35 mm	0.29 mm
4-ball EP weld point (ASTM D2783)	200 kg	160 kg
Copper strip (ASTM D130)	1a	1a
Turbine Oil Rust Test (ASTM D665B)	Pass	Pass

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.

Issued: 2019.08.23

TREATMENT LEVEL:

The recommended treatment level of **FUNCTIONAL SGP-567** is 1.5% by weight in appropriate base fluid such as canola oil. To achieve the higher ISO viscosity grades or to meet the specific ISO grades recommended by equipment manufacturers, a specialized thickener will be necessary. The recommended thickener is **FUNCTIONAL V-515**. **FUNCTIONAL V-584** may also be added to provide tack and promote adhesion of the oil to the saw guides and blades.

Please consult with Functional Products for recommendations when mineral oil is used as the base fluid.

BIOBASED FORMULATION GUIDE:

Recommended Bio Technology Starting Point Formulations			
	ISO 68	ISO 100	ISO 150
Exceptionally Tacky > 80 DS*	10% V-584 1.5% SGP-567 Balance Canola Oil	25% V-584 1.5% SGP-567 Balance Canola Oil	33% V-584 1.5% SGP-567 Balance Canola Oil
Very Tacky 65 - 80 DS*	4% V-515 8% V-584 1.5% SGP-567 Balance Canola Oil	7% V-515 8% V-584 1.5% SGP-567 Balance Canola Oil	11% V-515 9% V-584 1.5% SGP-567 Balance Canola Oil
Tacky 50 - 65 DS*	5% V-515 6% V-584 1.5% SGP-567 Balance Canola Oil	8% V-515 7.5% V-584 1.5% SGP-567 Balance Canola Oil	13% V-515 6.5% V-584 1.5% SGP-567 Balance Canola Oil

* DS indicates the string length determined by Functional Products Ductless Siphon Tackiness Test at room temperature.

HANDLING:

Store in a cool, dry area. Review the current Safety Data Sheet before use.

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