



## Product Data Sheet

# ESSO SAWGUIDE OIL

## FRICITION REDUCING SAWGUIDE LUBRICANT

March 2007

ESSO SAWGUIDE OIL offers the following features and benefits:

- ◆ **Designed to lubricate and protect guides on modern gang saws and edgers while reducing lubricant consumption**
- ◆ **Available in three grades; 68, 100 and 150**
- ◆ **All grades provide outstanding control of friction and wear**
- ◆ **Resists water wash-off to provide reduced lubricant use**
- ◆ **Controls pitch deposits**
- ◆ **Protect against rust**
- ◆ **Minimizes cooling water requirements**
- ◆ **Excellent demulsibility to meet OEM requirements**
- ◆ **Controls stray mist**
- ◆ **Increased cutting efficiency, reduced power consumption and easier blade and guide maintenance**

### *Primary Applications*

ESSO SAWGUIDE OIL uses technology carefully formulated to deliver maximum lubricity and wear reduction on the guides of modern gang saws and edgers. Careful choice of components provides excellent demulsibility to separate the oil and water meeting OEM requirements and enhancing rust protection. The choice of viscosity grade depends on equipment type, lubricant delivery system design and ambient temperatures. Imperial Oil sales representatives can assist in the proper viscosity grade selection.

### *Performance Features*

#### **Friction Reduction**

ESSO SAWGUIDE OIL is formulated to cling tenaciously to the guide in the presence of dirt and water to form an effective friction reducing film between the blade and the guide. Reducing the friction reduces the temperature. Lower temperatures require less cooling water; the result - drier sawdust. Friction reduction due to more robust oil film leads to less lateral movement of the blade and more accurate cuts resulting in reduction of kerf and waste.

#### **Oil Consumption Control**

The same carefully chosen additives that provide the tenacious film to reduce friction also prevent water wash-off and lubricant fling-off allowing much lower application rates

#### **Pitch Deposit Control**

The buildup of pitch or wood resin, on the blade and sawguide increases friction and accelerates wear. ESSO SAWGUIDE OIL is formulated to

control pitch buildup on blade surfaces. In the Kauri-butanol test that measures hydrocarbon solvency ESSO SAW GUIDE OIL exhibits an exceptional value of 6.6 -- at the high end of the typical solvency range for sawguide lubricants.

**Wear Protection**

ESSO SAWGUIDE OIL uses a potent EP/Antiwear additive system that bonds with the guide and blade surfaces to provide a wear reducing layer to protect the guide/blade interface resulting in longer life and fewer guide changes.

**Rust Protection**

ESSO SAWGUIDE OIL contains rust and corrosion inhibitors to protect blade surfaces from lumber staining rust.

**Stray Mist Control**

Tackiness additives are used in the ESSO SAWGUIDE OIL formulations to reduce the amount of oil thrown or blown off blades by the

action of air/water sprays. Stray mist control leads to a cleaner healthier work environment.

**Precautions**

ESSO SAWGUIDE OIL is manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to our Imperial Oil Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

**Typical Properties**

	<b>ESSO SAWGUIDE OIL - 68</b>	<b>ESSO SAWGUIDE OIL - 100</b>	<b>ESSO SAWGUIDE OIL - 150</b>
Colour	1.0	1.0	2.0
Flash Point °C	215	225	225
Density @ 15°C, kg/L	0.877	0.878	0.882
Kinematic Viscosity			
- cSt @ 40°C	68	91	150
- cSt @ 100°C	9.6	11.5	16.2
Pour Point, °C	-30	-24	-15
Water Separation Test, ml			
@ 54 °C	38		
@ 82°C		38	38
Rust Prevention	PASS	PASS	PASS
Falex Pin and V Block (ASTM D 2670)			
Mass Loss, mg.	8.5	9.0	7.2
Tooth count	1	2	1

*These values represent normal production quality. Some are controlled by manufacturing specifications while others are not. All may vary within modest ranges.*