

## UNITED SPINDLE OIL

United Spindle Oil is a premium grade, severely refined oil based extra low viscosity product specially for lubricating high speed spindles in knitting machines.

Adopting highly refined special grade base oil, Spindle oil is naturally in low odor and viscosity that are essential to be used to lubricate the lightly loaded spindles that rotated in very high speed and give good finish of the textile. Results in reduced operating temperature and much less machine or operation break down.

Spindle oil is available in viscosity grade 10 for optimized lubrication requirement. It can be used widely for most high speed, light duty spindles found in most types of textile machines.

### APPLICATIONS / BENEFITS

- Special grade base oil also gives good oil film protection.
- Very light color and low odor.
- Light viscosity ensures smooth operations.
- Maximizing knitting machine performance.

### TYPICAL CHARACTERISTICS

TEST DESCRIPTION	METHOD	TYPICAL RESULTS				
ISO Viscosity Grade	-	2	5	10	15	22
Specific Gravity @ 15 °C	ASTM D 4052	0.817	0.822	0.828	0.833	0.845
Flash Point, °C	ASTM D 92	120	145	175	190	202
Pour Point , °C	ASTM D 97	-30	-30	-30	-21	-18
Kinematic Viscosity @40°C (cSt)	ASTM D 445	2.35	5.12	10.2	14.89	22.4
@100°C (cSt)	ASTM D 445	-	-	2.86	3.52	4.38
Viscosity Index	ASTM D 2270	-	-	110	116	103
Color	ASTM D 1500	<0.5	<0.5	<0.5	<0.5	<0.5