



LUBRICANTS

## TCS Slideway Lubricant

Phillips 66® TCS Slideway Lubricant is a premium quality circulating oil developed for the lubrication of lathes and heavily loaded machine tool slideways. It is specially formulated to prevent stick-slip problems to ensure good surface finish on the machined part, and to provide quick and effective separation from water and metalworking fluids.

TCS Slideway Lubricant is specially formulated to allow machine tool carriages to start easily and move smoothly throughout their travel, thus preventing stick-slip problems. This reduces carriage chatter and ensures a smooth finish on the machined part. Mild extreme-pressure properties prevent scoring of the slideways during carriage travel. A tackiness additive improves adhesion and prevents the oil from being squeezed off the slideways. It also helps prevent the oil from being washed away by cutting fluids. Additional proprietary additives provide protection against rust and corrosion and allow optimum separation from coolants and tramp oils.

TCS Slideway Lubricant is water-white in color to allow easy visibility of machined parts.

### Applications

- Horizontal and vertical slideways on machine tools, such as lathes, planers, shapers, drilling machines, milling machines, and screw machines
- Lumber mill saw carriages
- Printing presses
- Other applications that require a clear, tacky slideway oil

### Features/Benefits

- Excellent anti-stick-slip performance
- Excellent coolant-separating properties
- Good surface finish
- Protects against scoring and wear
- Good adhesion for retention on slideways
- Protects against rust and corrosion
- Water-white in color for easy visibility

**Premium  
Machine Tool  
Slideway  
Lubricant**

KEEPING THE  
WORLD  
RUNNING  
SMOOTHLY. 



## TCS Slideway Lubricant

Typical Properties			
ISO Grade	32	68	220
Specific Gravity @ 60°F	0.848	0.870	0.874
Density, lbs/gal @ 60°F	7.06	7.24	7.28
Color, ASTM D1500	0.0	0.0	0.0
Flash Point (COC), °C (°F)	205 (401)	232 (450)	280 (536)
Pour Point, °C (°F)	-15 (5)	-15 (5)	-12 (10)
Viscosity			
cSt @ 40°C	32.0	69.0	227
cSt @ 100°C	6.1	9.0	23.8
SUS @ 100°F	164	357	1,184
SUS @ 210°F	46.6	56.6	118
Viscosity Index	141	104	131
Acid Number, ASTM D664, mg KOH/g	1.3	1.3	1.3
Demulsibility, ASTM D1401, minutes to pass	20	20	20
Rust Test, ASTM D665 A&B	Pass	Pass	Pass
Stick-Slip Performance, ASTM D2877	<0.80	<0.80	<0.80

## Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.

07-12-16

Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

© Phillips 66 Company. Phillips 66<sup>®</sup> and its respective logos and products are registered trademarks of Phillips 66 Company in the U.S.A. and other countries.