

## RAIL LUBE TO REDUCE WEAR, ELIMINATE NOISE & REDUCE LOW SPEED DERAILMENTS

#### **SUPER-LUBE® RAIL LUBRICANT**

Super-Lube® Rail Lubricant is a synthetic composition that incorporates Polytetrafluoroethylene polymer (PTFE) into a unique and patented product. Engineered specifically for the interface of wheel and rail: to reduce wear, eliminate noise and aid in the reduction of low-speed derailments. It is available in formulations for gauge face and top of rail applications. It is inherently biodegradable.

PTFE provides maximum lubricity because of its very low coefficient of friction and its very high affinity for metal surfaces. This lubricant has ideal visco-elastic properties which enable SuperLube® to achieve remarkable carry and lubricating efficiencies. One study demonstrated carrying capability of 3 to 5 miles. Because of this superior balance of lubricity and adhesiveness, Super-Lube® also helps reduce risk of low-speed derailments.

Super-Lube® is an extremely effective wear reducer. In a study performed in partnership with San Diego Trolley, in a transit and freight environment, use of Super-Lube® has extended rail life of track that had been previously un-lubricated and worn to within 75% of condemnation, in excess of 48%. In rail that has had Super-Lube® from the day it was placed in service, it is anticipated to extend rail life by more than 215%. This equates to enormous cost savings to any railroad or transit agency.



#### **BENEFITS**

- ✓ Reduction of Wheel and Rail Wear
- ✓ Noise Suppression/Abatement
- ✓ Reduction in Low-speed Derailments
- ✓ Unparalleled Carry/Tracking Ability
- ✓ Environment Friendly
- ✓ Temperature range is -43°C to 232°C (-45°F to +450°F)
- ✓ Inherently Biodegradable
- ✓ Waterproof and will not wash off
- ✓ Prevents rust and corrosion



A Product of The Synco Chemical Corporation 24 DaVinci Dr. Bohemia, NY 11716 US Patent # 5,037,566 super-lube.com

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# GAUGE FACE RAIL LUBRICANT TECHNICAL DATA SHEET

### SUPER LUBE® RAILROAD GREASE WITH SYNCOLON® (PTFE)

Part #: 47-41040-5, 47-41040-5SRS, 47-41050-5		
TEST	TEST METHOD	RATING
NLGI Grade:	ASTM D217	1
Color:		Translucent White
Temperature Range:		-45°F to 450°F (-43°C to 232°C)
Viscosity (Base Oil) cSt @ 100°C: cSt @ 40°C:	ASTM D445 ASTM D445	8 350
Specific Gravity:	ASTM D1298	.89 @ 60°F
Dropping Point:	ASTM D2265	>550°F (287°C)
Penetration, worked (60 strokes)	ASTM D217	310 - 340 mm/10
Four Ball Test Load wear index: Weld point:	ASTM 2596	70.63 kgf 400 kg
Four ball EP Scar Diameter:	ASTM D2266	< 1.0 mm
Low Temperature Torque @ -54°C Starting: 10 minute running: 1 hour running:	ASTM D1478 ASTM D1478 ASTM D1478	0.27 N-m (0.37 in-lbs.) 0.08 N-m (0.11 in-lbs.) 0.006 N-m (0.09 in-lbs.)
Salt Spray Test (100 hrs.)	ASTM B117	Pass
Dielectric Loss:	ASTM D924	1.2 x 1012
Dielectric Resistivity:	ASTM D1169	1.7 x 1014
Dielectric Constant:	ASTM D924	2.5
Oil Separation:	ASTM D6184	< 2%
Evaporation Loss 22 hrs. @ 212°F (100°C):	ASTM D972	<1%
Oxidation Stability - 100 hrs.	ASTM D942	0.5 psi drop
Timken OK Load:	ASTM 2509	40 lbs.
Flash Point:	ASTM D92	>428°F (220°C)
Fire Point:	ASTM D92	>572°F (300°C)
Wheel Bearing Leakage:	ASTM D1263	< 1.0 g
Water Washout (max.):	ASTM 1264	< 1%
Copper Corrosion - 24 hrs. @ 100°C	ASTM D4048	1B, shiny
Acid Number:	ASTM D664	.5 mg KOH/g
Biodegradability	CEC-L33-T82	50% degradability in 28-35 days 60+% degradability in 56 days



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