



TUFF COAT M

PREMIUM CORROSION AND WEAR PROTECTION

BEYOND SYNTHETIC®

Royal Purple's Tuff Coat M contains specially formulated synthetic lubricants, penetrants and synthetic additives, which significantly extend the service life of wire ropes, armored cables and ROV umbilical's over a wide range of temperatures and working conditions common to the marine industry. Tuff Coat M has state-of-the-art corrosion inhibitors, exceptional penetrating and wetting ability and a strong adhesive film to keep the lubricant in place.

SYNERLEC® ADDITIVE TECHNOLOGY MAKES THE DIFFERENCE!

Synthetic oils enable Royal Purple to make superior lubricants, but it is Royal Purple's advanced Synerlec additive technology that gives its lubricants their amazing performance advantages. Synerlec additive technology truly is beyond synthetic.

Synerlec additive technology forms a tough, slippery, synthetic film on all metal surfaces. This proprietary film significantly improves lubrication: first, by increasing the oil film's thickness, and second, by increasing the oil film's toughness, both of which help to prevent metal-to-metal contact. It displaces moisture from metal surfaces and protects all metals against rust and corrosion. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

PERFORMANCE ADVANTAGES

Outstanding Corrosion Protection

Tuff Coat M contains state-of-the-art synthetic corrosion inhibitors to protect against moisture and salt spray. Royal Purple's Synerlec additive technology penetrates wire ropes, armored cables and ROV umbilical's and forms an "ionic bond" with metal surfaces that displaces moisture by forming a protective, chemical film.

Exceptional Penetrant / Wetting Ability

Tuff Coat M penetrates, coats and protects wire ropes, armored cables and ROV umbilical's over a wide range of working conditions.

Stays in Place

Tuff Coat M's strong, adhesive film keeps the lubricant in place.

Remains Fluid at Low Temperatures

Tuff Coat M does not harden in below freezing temperatures.

Free of Lubricating Solids

Tuff Coat M does not contain lubricating solids such as moly or graphite, which are messy and can build up on a cable.

Typical Properties*	Method	
Viscosity, Fluid	D-445	
cSt @ 40°C		2000
cSt @ 100°C		105
Viscosity Index	D-2270	130
Flash Point, °F/°C	D-92	485/252
Pour Point, °F/°C	D-6892	-22/-30
Rust Test	D-665	
Fresh Water		PASS
Salt Water		PASS
Four Ball EP Test	D-2783	
LWI		57
Last Non-seizure, kgf		80
Weld Load, kgf		315
Density, lbs/g	D-4052	7.39

**Properties are typical and may vary.*