



THE THERMYL-TUFF®

MAXIMUM LOAD SYNTHETIC LUBRICANT

BEYOND SYNTHETIC™

Thermyl-Tuff is recommended for booms on hydraulic cranes, heavily loaded open gears, skid rails, bushings, couplings, bearings, cables, etc., or low speed bearings operating at high temperatures.

Thermyl-Tuff is a viscous, tacky, semi-fluid lubricant that protects extremely heavily loaded sliding surfaces such as open gears, skid rails, etc., where other EP products perform poorly or even fail. Thermyl-Tuff cannot be washed off by water and its superior synthetic corrosion inhibitors provide outstanding protection in wet and / or corrosive environments.

Thermyl-Tuff is an undyed product.

SYNSLIDE® ADDITIVE TECHNOLOGY MAKES THE DIFFERENCE!

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

Synslide additive technology, Royal Purple's tough, EP lubricating film, provides maximum protection under boundary lubrication conditions typically caused by heavily loaded, slow speed and/or shock load conditions. This tenacious, slippery film significantly improves lubrication and reduces wear by increasing the oil film thickness and toughness, which helps to prevent metal-to-metal contact in gears and bearings.

Synslide additive technology is noncorrosive to gears and bearings, including case-hardened gears that are easily pitted by conventional sulfur-phosphorus EP oils.

Synslide additive technology displaces water from metal surfaces and excels in protecting equipment in wet environments. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

PERFORMANCE ADVANTAGES

- **Severe Service Performance**
Thermyl-Tuff provides unbelievably smooth, extreme pressure performance.
- **Adhesive Lubricant**
Thermyl-Tuff will not be squeezed or channeled from pressure areas.
- **Contains Cushioning Molecules**
Thermyl-Tuff dampens sudden severe shock loads.
- **Hydrophobic**
Thermyl-Tuff remains unaffected by fresh and saltwater.
- **Greater Lubricity**
Thermyl-Tuff noticeably reduces wear and saves energy.
- **Excellent Corrosion Protection**
Thermyl-Tuff protects all metals during operation and shutdown.
- **Compatible with Other Oils**
Thermyl-Tuff is compatible with mineral oils and most synthetic oils.
- **Easy to Use**
Thermyl-Tuff can be pumped, painted or swabbed onto exposed gears, rails, etc.
- **Long Lasting**
Thermyl-Tuff uses less lubricant, lasts longer and extends relubrication intervals.

Directions:

Because Thermyl-Tuff is so tenacious and lubricates so effectively, it should be applied sparingly by brush, automatic lubrication system, etc., to open gears and ways. Over lubrication is unnecessary and can be messy.

Note: Extremely tacky. This product is not recommended for dusty environments.

THERMYL-TUFF[®] MAXIMUM LOAD SYNTHETIC LUBRICANT

TYPICAL PROPERTIES*	ASTM METHOD	ISO GRADE		
		100	200	300
Color	---	Amber	Amber	Amber
Consistency	---	Viscous	Viscous	Viscous
Appearance	---	Semi-Fluid	Semi-Fluid	Semi-Fluid
Viscosity	D-445			
cSt @ 40°C		4800	8800	16,000
cSt @ 100°C		149	256	457
Viscosity Index	D-2270	108	130	154
Flash Point, °F	D-92	335	385	380
Pour Point, °F	D-6892	0	+10	+16
Copper Corrosion Test	D-130			
3 Hrs @ 100°C		1A	1A	1A
Rust Test	D-665			
Fresh Water		PASS	PASS	PASS
Salt Water		PASS	PASS	PASS
Four Ball EP Test	D-2783			
Load Wear Index		80	81	85
Weld Load, kgf		400	400	400
Density, lbs/g	D-4052	7.60	7.59	7.63
Water Solubility		Insoluble	Insoluble	Insoluble

*Properties are typical and may vary