THERMYL-TUFF®

Maximum Load Synthetic Lubricant

ROYAL PURPLE®

Beyond Synthetic™

Beyond Synthetic™

Thermyl-Tuff® is recommended for 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.

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 the oil to oxidize.

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.

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.

Royal Purple, Ltd. • 1 Royal Purple Lane • Porter, Texas 77365
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	ISO Grade		
Typical Properties*	100	200	300
Consistency	Viscous	Viscous	Viscous
Appearance	Semi-Fluid	Semi-Fluid	Semi-Fluid
Color	Amber	Amber	Amber
Water Solubility	Insoluble	Insoluble	Insoluble
Viscosity			
cSt @ 40˚C	4800	8800	17000
cSt @ 100˚C	148	256	465
SSU @ 100˚F	26718	48988	94673
SSU @ 210˚F	722	1251	2276
Viscosity Index	107	130	156
Pour Point ˚F	20	27	35
Specific Gravity @ 60/60˚F	0.910	0.913	0.910
Timken E.P. Test	100+	100+	100+
Corrosion Test	1 (Pass)	1 (Pass)	1 (Pass)
Rust Test			
Fresh Water	Pass	Pass	Pass
Salt Water	Pass	Pass	Pass
4-Ball Weld, kg.	400+	400+	400+
4-Ball Wear, 20 kg.	0.49	0.48	0.46
Oxidation Test, 250˚F	Pass	Pass	Pass

*Properties are typical and may vary

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