KLENEDRAW® W-4177

KLENEDRAW® W-4177 is a synthetic, VOC-free product, that does not contain petroleum oil, formulated to lubricate a wide variety of metal forming operations. It absorbs on metal surfaces forming a high strength lubricating film. **KLENEDRAW® W-4177** is effective for multi-stage forming, drawing, deep drawing, roll forming and tube bending applications. When mixed with water at 6:1 or greater, it leaves a minimal residue on metal surfaces after drying.

USAGE

KLENEDRAW® W-4177 should be used as a straight concentrate, or at dilutions up to 20:1 with tap water. It can be applied in minimal amounts by using Jet-Set® airless spray, drip, roller coater or similar methods. **KLENEDRAW® W-4177** is used on ferrous metals, stainless steel, zinc coated metal, and aluminum. It is typically used on material up to 0.100" (2.5 mm) thick. **KLENEDRAW® W-4177,** run at 4:1, will provide rust protection to ferrous parts stored inside for over 90 days. It can be cleaned with warm water or a weak solution of alkaline cleaner such as **TOWERKLENE 42-A** run at a 2% – 5% concentration.

PHYSICAL CHARACTERISTICS

Density	1.03 g/ml 8.59 lbs/gal
Appearance	Amber Liquid
Odor	Bland
Flash Point	None
Refractive Index	13.6 @ 3:1 10.9 @ 4:1 9.1 @ 5:1
(freshly diluted)	7.8 @ 6:1 5.4 @ 9:1 4.2 @ 12:1
Refractive Index Factor	1.84 x RI = Vol %

BENEFITS

- **Contains No Hazardous Ingredients**
- **Has No Volatile Organic Compounds (VOC's)**
- **Does Not Contain Chlorine, Sulfur, or Phosphorous**
- **Has Excellent Rust Protection for Inside Storage**
- **Cleans Easily In Low Temperature Water Base Solutions**
- **Safe To Welded Through Without Cleaning**
- **Can Replace Vanishing Oil in Many Instances**
- **Mixes Easily With Water**
- **Is Environmentally Friendly**

TECHNICAL SUPPORT

TOWER wants to assist you in evaluation and selection of suitable products. We urge you to take advantage of this service. This information sheet and **TOWER,s** assistance, however, are not a substitute for your own testing and evaluation. 13248

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