



# KLENEDRAW® W-4898

**KLENEDRAW W-4898** is a synthetic solution formulated as a lubricant for metal stamping and drawing operations. It does not contain petroleum oil. **KLENEDRAW W-4898** will provide lubrication for extreme duty metal forming operations. It has excellent wetting characteristics and interacts with metal surfaces to produce a high strength boundary and chemical extreme pressure lubricating film. **KLENEDRAW W-4898** dries to a soft non-sticky residue that cleans easily in low temperature aqueous wash systems. Its chemistry is non-hazardous under OSHA regulations and does not require hazard pictograms on the label.

## USAGE

**KLENEDRAW W-4898** can be used to form high strength steel alloys, stainless steel, zinc coated steel, and aluminum. It can be used as a straight concentrate or at dilutions up to 19:1 with water. Add **KLENEDRAW W-4898** to water and mix until it forms a pure solution with the water. It can be applied using airless spray systems, drip, roller coater or flood methods. Parts are easily cleaned in aqueous wash systems using an alkaline cleaner at a low concentration.

## PHYSICAL CHARACTERISTICS

Appearance	Dark Amber Liquid
Odor	Mild Soap
Density	1.03 g/ml 8.6 lbs/gal
pH of Concentrate	Typically 9.4
VOC's	0.0 g/L (EPA Method 24)
Refractive Index Factor	1.11 x RI = Vol %

## BENEFITS

- **Non-Hazardous, No Pictograms Required**
- **Soft Non-Sticky Residue**
- **Affords Excellent In-Process Rust Protection**
- **Cleans Easily in Low Temperature Water Based Solutions**
- **Replaces Straight Compounded Oils**
- **Performs Heavy-Duty Operations at Extended Dilutions**
- **Weld Through Without Cleaning and Low Odor**
- **Produces an Extreme Pressure Lubricating Film**

## TECHNICAL SUPPORT

This is a Proprietary product. 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.