

## **Kleen & Green**

### ***Oxypropylene Blend hydraulic fluid***

This mineral oil free environmental friendly formulation has been proven to eliminate sludge and varnish thus improving overall hydraulic system performance. Kleen & Green is readily biodegradable and cleans up with soap and water. It is ideally suited as a direct substitute for mineral oil based hydraulic fluids and is compatible with most existing standard hydraulic equipment, seals and hoses\*. This product continues to flow in temperatures ranging from -47 to 120 degrees F which makes it especially suitable for car wash, industrial and manufacturing applications. Kleen & Green is light green in appearance and is highly visible for leak detection. Using Kleen & Green minimizes down time in your operation due to hydraulic leaks and doesn't contaminate reclaim systems or damage wash equipment. A simple installation process enables a quick conversion in your hydraulic system to a high performance synthetic lubricant.

### ***Kleen & Green Hydraulic Conversion***

***\*Do not use with polyurethane seals, paper cartridge filters or non-anodized aluminum.***

***E.P.R Viton seals are recommended for your pump and motors. Use water based compatible hydraulic hoses. Consult hydraulic system OEM for compatibility.***

### ***Installation Procedure***

- Turn off power pack power source. (Lockout / Tagout)
- Remove filler cap and screen.
- Pump out all of the mineral oil hydraulic fluid from the reservoir into a suitable container.
- Place an empty 5gal pail to capture draining oil when removing clean out plugs.
- Once oil has completely drained replace clean out plugs.
- Replace existing filter with a 10 micron fiberglass, hydraulic fluid filter.
- Pump Kleen & Green into the empty reservoir leaving two inches from top of tank.
- Disconnect return line from power pack and place end into an empty 5gal container (additional pails may be needed due to oil volume in system)
- Turn on power pack and observe fluid color being discharged from return line, fluid will begin to turn green.
- Continue to run power pack until fluid is almost completely green.
- Turn off power pack and reconnect return line to the power pack. Fill reservoir with Kleen & Green within 2 inches of the top of the tank.
- Turn on power pack and run for 10-15 minutes for leak inspection.
- Turn off power pack and remove filler cap, top off with Kleen & Green so that fluid level is within 2" of the top of the reservoir tank.

## **Kleen-Rite Kleen & Green Specifications**

- Meets ANSI-B 93.5 Fire Resistant Requirements
- Meets NFPA/T2.13.1 124-2007 Steady State Pressure Requirement

## **Vital Stats**

- Viscosity Index >200
- Cinematic Viscosity @ 40C (cST) 30.5
- ISO 46
- Weight 8.66lbs. per gallon
- Specific Gravity 1.0396

## **Kleen-Rite Kleen & Green FAQ's**

### ***What is Kleen & Green?***

*Kleen & Green is an Oxipropylene Blend hydraulic fluid, completely biodegradable, ideal formulation for environmentally sensitive applications. It has superior heat transfer properties and thermal/oxidation stable.*

### ***Does this formulation have water in it?***

*Less than 1%*

### ***What are the benefits in using this formulation to that of typical hydraulic fluids?***

*Better performance at lower operating temperatures eliminating the need for tank heaters, High performance synthetic lubricant with increased oxidative stability, high viscosity index at low pour points and contains rust inhibitors making it well suited for many industrial and manufacturing applications.*

### ***What is the ideal temperature for Kleen & Green?***

*The fluid was tested in 2010 by Clark Testing Services, LLC at temperatures of 127-147F at pressures up to 1400lbs pumps were run up to 1200 rpm. Ideal temperatures are between 32 AND 150F*

### ***Does the fluid get thicker when it gets hotter?***

*No, the fluid is designed to stay at ISO 46*

### ***Is this product safe with most motors & seals?***

*Compatible with standard seals including Viton, however it is not recommended to be used with polyurethane seals, paper cartridge filters or non-anodized aluminum. Consult with hydraulic system OEM for compatibility.*