



aerospace  
 climate control  
 electromechanical  
**filtration**  
 fluid & gas handling  
 hydraulics  
 pneumatics  
 process control  
 sealing & shielding



# DuraClean™

Premium Hydraulic Fluid



ENGINEERING YOUR SUCCESS.

# Parker DuraClean™

## Applications

### Together we can...

**P**reserve the environment.  
Minimize waste and promote energy efficiency.

**A**chieve worldwide filtration solutions.  
Build global confidence.

**R**edefine new limits.  
Forge ahead with advanced technology.

**K**eep contamination under control.  
Reduce maintenance costs.

**E**nhance total system reliability.  
Focus on customer satisfaction.

**R**each optimum potential.  
Drill to greater depths.

...engineer your success.

DuraClean™ hydraulic fluid was developed with a totally unique 'Clean Technology.' This fluid innovation keeps harmful deposits from settling on components. These deposits can lead to system damage, component replacement, unanticipated downtime and compromised performance. Parker DuraClean™ makes it possible for hydraulic systems to 'Start Clean and Stay Clean.'

Durable performance allows the formulation to provide excellent protection of components even after the fluid has been used extensively. Varnish protection solutions provide proven performance and viscosity retention in wide temperature range, setting Parker DuraClean™ apart from competitive fluids.

## Applications

- Drain-and-change for most industrial and mobile hydraulic systems specifying mineral-based oil
- Top-treat for replenishing hydraulic systems already using VG 32, 46, and 68 hydraulic oils
- Wide operating temperature range requirements
- High performance hydraulic power units and equipment
- Systems with high pressures and temperatures



# Parker DuraClean™

Starts Clean. Stays Clean.

DuraClean™ is an ultra premium hydraulic oil provided exclusively by Parker. The fluid has a unique additive chemistry designed to maximize oil life while providing optimum anti-wear protection for the components of today's advanced hydraulic systems.

## *Performance Features*

- ISO 46, all season, multigrade hydraulic fluid
- Replaces ISO 32, 46, and 68 monogrades
- API Group II base oil extends oil life
- High viscosity index for wide operating temperature ranges
- Outstanding oxidation life to maximize component life
- Prevents varnish formation
- Clean, as packaged, to ISO 17/15/12 cleanliness standard
- Special formulation that allows for rapid air release and water separation
- Excellent filterability to minimize filter blockage
- Outstanding acrylate anti-foam agent contains no silicones, which can lead to inaccurate particle counts
- Excellent shear stability for stable viscosity over time
- Superior thermal stability for uncompromised performance at high temperatures
- Parker gold dye for easy identification
- Formulated to help extend the life of hoses and seals

## *Performance Approvals*

- Parker Hannifin HF-0 (Denison HF-0)
- Eaton Vickers brochure 03-401-2010 (M-2950-S and I-286-S)
- Cincinnati Machine P-70
- Meets DIN 51524 Part 3 requirements
- Meets US Steel 127



# Parker DuraClean™

## DuraClean™ vs. Varnish

	Without DuraClean™	With DuraClean™
Oil Flow	Leaves critical system components starved for lubrication and leads to part failure	Keeps system protected and extends component life
Filters	Develops plugged filters which forces fluids to bypass filters increasing contaminants and excessive wear and necessitates extra filter changes	Protects system from contaminants and plugged filters
Valves	Creates loss of system control which has a negative impact on productivity and results in downtime for cleaning and repairs	Maintains system cleanliness and keeps valves free from damaging varnish
Friction	Creates higher friction causing increases in fuel and energy consumption, component wear and lower productivity	Improves system efficiency, extends component life and maintains productivity
Thermal Stability	Promotes oxidation of fluid and thermal breakdown, creating varnish and increasing wear	Keeps system operating at cooler temperatures allowing the oil and the components to last longer
Varnish Protection	Increases the need for frequent cleaning and repairs	Minimizes the need for frequent cleaning and repairs
	<b>Varnish</b>	<b>No Varnish</b>

# Parker DuraClean™

DuraClean™ vs. Varnish

## Without Parker DuraClean™ – Varnish



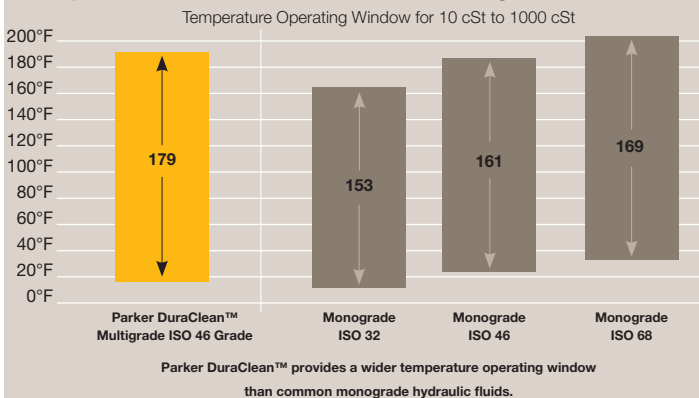
Varnish is attracted to metal surfaces, this results in an overall decrease in productivity.

## With Parker DuraClean™ – No Varnish

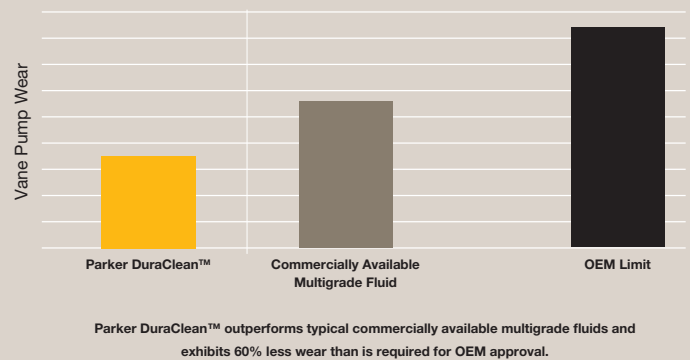


Parker DuraClean™ prevents the harmful build-up of varnish, keeping systems clean and operating at peak efficiency.

### Comparison of Parker DuraClean™ to Monograde Hydraulic Fluids



### Parker DuraClean™ has Excellent Antiwear Performance



If a hydraulic system is dirty, simply using Parker DuraClean will not clean it up, but it will effectively prevent the formation of varnish in a clean system and keep the delicate balance of additive performance intact.

# Parker DuraClean™

## Specifications

Typical Properties	Test Method	
ISO Grade		Multigrade 46
Appearance		Parker Gold
Specific Gravity @ 15°C	D4052	.867
Flash Point (COC) °F(°C)	D92	413 (212)
Pour Point °F(°C)	D97	-43 (-42)
Viscosity	D445	
cSt @ 40°C		44.30
cSt @ 100°C		7.65
Viscosity Index	D2270	<b>141</b>
Acid Number, mg KOH/g TAN	D664	0.6
Oxidation, hrs.	D943	<b>5500 - 6000 Typical</b>
Rust Test	D665A/D665B	Pass
Denison Filterability		
Dry, time in seconds		172 (600 maximum limit)
Wet, time in seconds		202 (344 maximum limit)
Thermal Stability, sludge in mg		<b>2.5</b> (25 maximum limit)
Shear Stability	KRL	
% viscosity loss after 20 test hours		<b>4.3</b> (15 maximum limit)

## Ordering Information

Package Size	Part Number	Minimum Order Qty.
Jug (2 1/2 gal.)	942180	72
Pail (5 gal.)	941907	24
Drum (55 gal.)	942125	4
Tote (275 gal.)	942126	1

Other volumes may be available. Please consult factory.

**Visual Representation of New Fluid Cleanliness  
vs.  
Fluid Oxidation After 1,300 Hours**

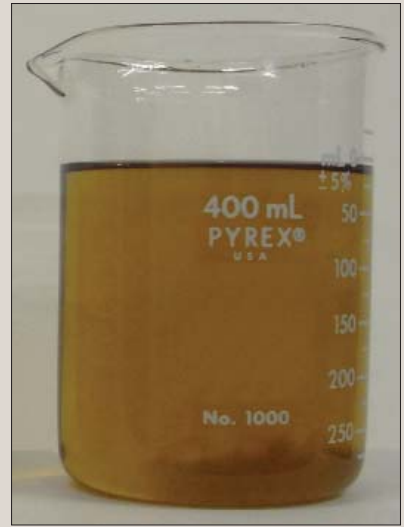
**DuraClean™**  
ISO 15/14/12  
100X



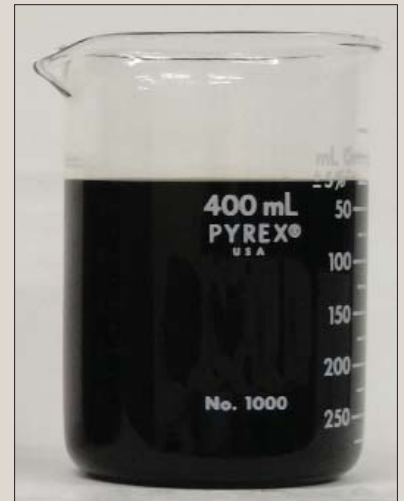
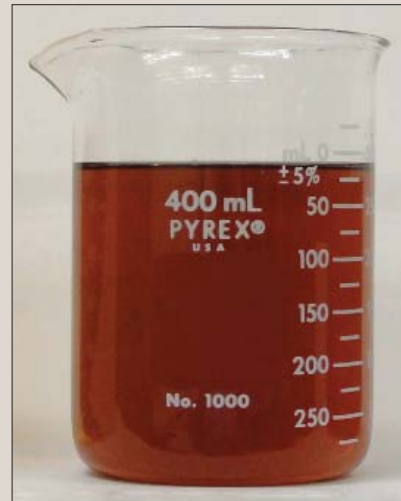
**Product B**  
ISO 22/20/14  
100X



**Product C**  
ISO 25/24/21  
100X



Initial samples taken directly from a 5 gallon pail



Same samples after 1,300 hours of exposure @ 200°F

