

405 D SERIES "Dual Purpose"

Removes Particulate, Detects Phase Separation & Water Sensing



Patent # 6,373

40510D "Dual Purpose"

Detects and Reacts to Phase Separation
in Ethanol Blended Fuels
Senses Water in Neat Gasoline

FOR FUEL DISPENSERS

BENEFITS

- PetroClear model 40510D is a particulate removing, water sensing and phase separation detecting spin-on filter designed to remove particulate from NEAT GASOLINE or Ethanol blended gasoline.
- PetroClear model 40510D is a particulate removing, phase separation and water sensing spin-on filter. This filter is designed to sense water, both free and emulsified, and slow flow as an indicator of the presence of water in NEAT GASOLINE. This filter is also designed to detect and react to phase separation. Slow flow is an indicator of the presence of phase separation in Ethanol blended gasoline.
- PetroClear model 40510D filter offers efficient 10 micron nominal particulate removal (nominal = 75% efficiency), and senses both free and emulsified water in NEAT GASOLINE and detects and reacts to phase separation should it occur.
- UL recognized for Ethanol blended fuels and NEAT GASOLINE.
- The water and phase separation sensing filter is not a fool-proof mechanical positive shut-off. If this filter remains in service after going into slow flow it can return to full flow, allowing contaminated fuel to be dispensed into the consumer's vehicle and cause potential damage.

**PetroClear FILTERS ARE NOT TO BE USED
IN AVIATION FUEL APPLICATIONS.**

SPECIFICATIONS

- The PetroClear model 40510D utilizes a 10 micron cellulose media to remove particulate from gasolines plus water sensing in NEAT GASOLINE and phase separation detecting capabilities for Ethanol blended gasoline. Removes a minimum of 75% of particulate 10 micron in size (and approximately 100% of larger particulate). It utilizes a super absorbent media for sensing water in NEAT GASOLINE and a chemical core assembly to detect and react to phase separation in Ethanol blended fuel.
- Once the PetroClear model 40510D has absorbed 5.9 ounces (175 mil) of water from NEAT GASOLINE, flow will be noticeably slow.
- The chemical center core assembly detects and reacts to phase separation and significantly restricts flow through filter keeping phase-separated gasoline from going into a customer's vehicle.
- The "Dual" model 40510D utilizes an epoxy coated interior shell to eliminate oxidation (rusting) that can cause pinhole leaks from inside the filter shell.
- PetroClear model 40510D "Dual Purpose" utilizes a standard 1" – 12 UNF mounting thread ref. (3/4" flow) required for most spin-on filter adaptors used in aftermarket.
- The maximum flow rate for PetroClear model 40510D is 20 gpm (76 lpm). Maximum operating pressure is 50 psid (3.4 bar). Maximum differential pressure is 25 psid (1.7 bar). Collapse pressure is 150 psid (10.3 bar). Maximum operating temperature is 250°F (139°C).
- Adaptors are available for model 40510D in aluminum and cast iron. These single adaptors are available in both 3/4" and 1" NPT and BSP inlet/outlet threads.

NOTE: If you experience frequent filter changes, it is recommended that you have fuel samples analyzed to determine the source of contamination, such as water, dirt, rust, bacteria, phase separation, etc.

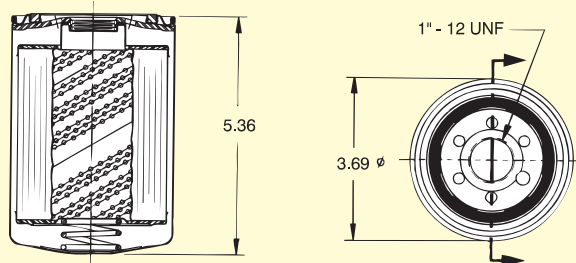
For disposal information please contact your nearest EPA office.

40510D

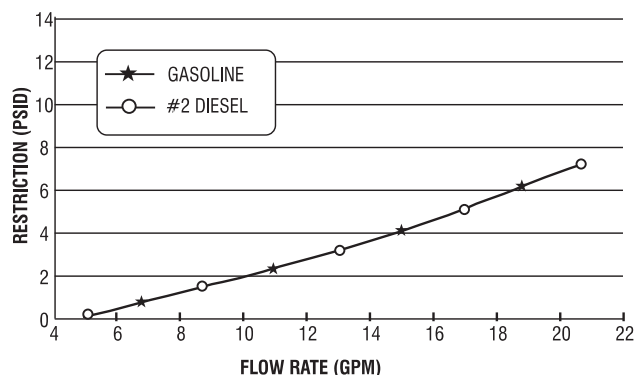
"DUAL PURPOSE"

Detects Phase Separation & Water Sensing

40510D



PetroClear 40510D



Model	40510D
Filter Type	Spin-On
Media Type	*Cellulose with Super Absorbent Media and Chemical Core
Micron Rating	10 Micron (Nominal = 75% Efficiency)
Diameter	3.69"
Height	5.36"
Mounting Thread	1" – 12 UNF
Flow	3/4" flow
Shell Thickness	0.020
Gasket Material	Buna N
Collapse (Min.)	150 psid (10.3 bar)
Burst (Min.)	250 psi (17.2 bar)
Max. Operating Temp.	250°F (139°C)
Min. Operating Temp.	-20°F (-28.9°C)
Other Features	Epoxy Coated Shell, UL Recognized US & Canada

*Particulate Removing, Water Sensing and Chemical Core Detects Phase Separation

Adaptors Available	Catalog	Description
	0.75 N1-12	.3/4" NPT Ports, 1" – 12 UNF (cast iron)
	0.75 N1-12A	.3/4" NPT Ports, 1" – 12 UNF (aluminum)
	1.00 N1-12	.1" NPT Ports, 1" – 12 UNF (cast iron)
	1.00 N1-12A	.1" NPT Ports, 1" – 12 UNF (aluminum)
	0.75 B1-12	.3/4" BSP Ports, 1" – 12 UNF (aluminum)
	1.00 B1-12	.1" BSP Ports, 1" – 12 UNF (aluminum)

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PetroClear is a technological product of Champion Laboratories, Inc. Changes may occur based upon technology, process and material innovation as Champion Laboratories, Inc. strives to attain the highest levels of performance and customer satisfaction. These changes may occur without notification.