405 D-AD SERIES "Dual Purpose"

Detects Phase Separation & Water Sensing

Patent #

40510D-AD "Dual Purpose"

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

FOR HIGH-FLOW FUEL DISPENSERS

BENEFITS

- PetroClear model 40510D-AD is a particulate removing, water sensing and phase separation sensing spin-on filter designed to remove particulate from NEAT GASOLINE or Ethanol blended gasoline.
- PetroClear model 40510D-AD is a water sensing and phase separation 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 phase separation and slow flow as an indicator of the presence of phase separation in Ethanol blended gasoline.
- PetroClear model 40510D-AD filter offers efficient 10 micron nominal particulate removal (nominal = 75% efficiency), and senses both free and emulsified water in NEAT GASOLINE, and reacts to phase separation shouldn't 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

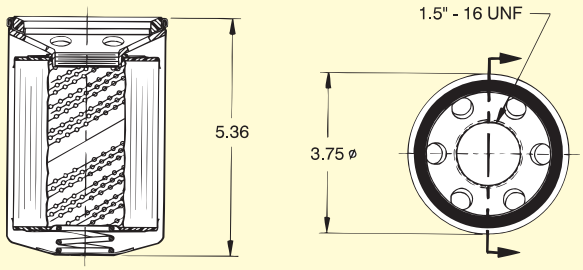
- The PetroClear model 40510D-AD utilizes a 10 micron cellulose media to remove particulate from gasolines plus water sensing in NEAT GASOLINE and phase separation detecting capabilities for Ethanol blended gasoline. Removes a minimum of 75% of particulate 10 micron in size (and approximately 100% of 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 PetroClear model 40510D-AD 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-AD utilizes an epoxy coated interior shell to eliminate oxidation (rusting) that can cause pinhole leaks inside the filter shell.
- The maximum flow rate for PetroClear model 40510D-AD is 25 gpm (95 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).
- PetroClear model 40510D-AD "Dual Purpose" high-flow filters utilize a standard 1-1/2" – 16 UNF mounting thread ref. (1" flow) required for most spin-on filter adaptors used in aftermarket and/or today's high-flow fuel applications such as the Advantage, Encore, Eclipse and other high-flow dispensers.
- Adaptors are available for model 40510D-AD in aluminum. Inlet/outlet sizes are available in 3/4" and 1" NPT single adaptors.

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.

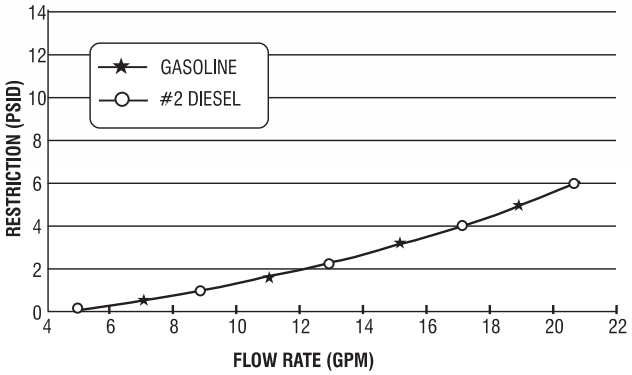
For disposal information please contact your nearest EPA office.

40510D-AD
"DUAL PURPOSE"
Detects Phase Separation & Water Sensing

40510D-AD



PetroClear 40510D-AD



Model	40510D-AD
Filter Type	Spin-On
Media Type	*Cellulose With Super Absorbent Media and Chemical Core
Micron Rating	10 Micron (Nominal = 75% Efficiency)
Diameter	3.75"
Height	5.36"
Mounting Thread	1-1/2" –16 UNF
Flow	1" 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 and Chemical Core Detects Phase Separation*

	Catalog	Description
Adaptors Available	0.75 N1.5-16AD	3/4" Inlet/Outlet Ports, 1-1/2" – 16 UNF (aluminum)
	1.00 N1.5-16AD	1" Inlet/Outlet Ports, 1-1/2" – 16 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.