DATA BULLETIN



## Quickshot®

# Formulated to Restore Peak Performance in Small Engines and Powersports Equipment

Degraded fuel presents a major maintenance issue in small engines and powersports equipment. It can form varnish, gum and insoluble debris that clog carburetors, fuel injectors and fuel filters. Carbon build-up can form on the tops of pistons, causing pre-ignition, rough idling and poor throttle response. Fuel-related problems are only expected to intensify in the coming years as the ethanol content in pump gasoline continues to increase.

AMSOIL Quickshot (AQS) is a premium fuel additive formulated to thoroughly clean and restore peak performance in small engine and powersports equipment fuel systems. It also stabilizes fuel between uses and during short-term storage. Its revolutionary technology focuses on three major fuel-related issues plaguing these applications: ethanol, water and dirty pump gas.



### **Ethanol**

Ethanol in fuel has a tendency to absorb water and separate from the gasoline (a process known as phase separation), sinking to the bottom of the gas tank where it quickly degrades and creates gum, varnish and other insoluble debris that can plug fuel-flow passages and negatively affect engine performance. When this ethanol/water mixture is pulled into the engine, it creates a lean-burn situation that increases combustion chamber temperatures and can lead to engine damage. AMSOIL Quick-shot is designed to keep water dispersed throughout the fuel tank, moving it out as a normal part of operation and decreasing the chance of ethanol separating from the gasoline.

Quickshot was tested in fuel containing 10 percent ethanol. Controlled plugging of injectors showed a 70 percent flow improvement, while oxidation stability improved 44 percent over untreated fuel.

#### Water

Water finds its way into gas tanks through condensation in tanks open to the atmosphere, gas pumps and other environmental conditions, and if left untreated, will cause starting, performance and corrosion problems. By keeping water dispersed in tiny molecules and safely moving it out of the tank through the combustion chamber, Quickshot helps maintain engine performance and protects against damaging corrosion.

#### **Dirty Gasoline**

Dirty gasoline causes fuel-system gumming and varnish, as well as piston and combustion chamber deposits. Although all gasoline sold in the U.S. is formulated with a lowest additive concentration (LAC) level of detergent additives, these detergent levels are not enough to prevent deposits from building up on critical fuel system components. Quickshot contains unique chemistry that quickly detaches and carries away deposits and buildups in fuel systems, injectors and carburetors, while also cleaning hard-to-remove deposits on piston tops, spark plugs and other combustion chamber parts.



#### **Phase Separation**



When ethanol/water mixtures fall to the bottom of fuel containers, it leads to lean-burn situations. Quickshot helps keep water molecules dispersed to prevent phase separation.

#### **APPLICATIONS**

Quickshot (AQS) is recommended for use in all two- and four-stroke gasoline-powered engines, including motorcycles, snowmobiles, boats, personal watercraft, ATVs, edgers, tillers, mowers, snowblowers, chainsaws, generators and farm and construction equipment. However, AMSOIL P.i.® Performance Improver is the superior choice for passenger vehicle applications.

#### **RECOMMENDATIONS**

Quickshot is designed for an initial clean-up dose of 8 oz. per 6 gallons of gasoline, followed by 8 oz. per 12 gallons thereafter. Slight overtreatment has no negative consequences.



Contact your AMSOIL Dealer for more information on AMSOIL products or to place an order. You may also order direct by calling AMSOIL INC. at 1-800-956-5695 and providing the referral number listed here. ▼

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Referral #	