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To those considering use of automotive fuels or fuels containing alcohol in MSA carburetors,

Alcohol (as in Gasohol) does not have serious direct deleterious effects on the materials used in the MSA type aviation carburetors. The materials used are, however, susceptible to corrosion from moisture and degradation from other chemicals and compounds in fuel or content that may form in this type fuel over time.

Alcohol attracts water. It keeps water suspended in fuel; at least until a certain concentration of water/alcohol mixture exists in the gasoline. Then it may separate out. If the engine picks up water power will be lost. The water in the fuel may lead to accelerated corrosion and the growth of biologic contaminants. Excess water in fuel can cause corrosion or these products may form dissimilar metals corrosion that may clog screens and jets. There are many articles on the internet and elsewhere that address these issues.

Another consideration involves fuel delivery. Compared to gasoline, a great deal more alcohol by volume is required to produce an equivalent power. Thus, a carburetor that is sufficiently rich when operated on avgas may be too lean on auto fuel or gasohol. There are many issues, as I am sure you are aware, involved with running an engine too lean ranging from engine damage to spark plug fouling and loss of power.

While it can be said that the materials used in the carburetor are not particularly susceptible to direct, severe or rapid damage from alcohol in gasohol, the long term affects of using gasohol are not completely known. The constituents in aviation fuel are closely controlled whereas auto fuel's composition varies widely between sources and often seasonally. The effects of the various constituents used and their long term affect on MSA carburetors are not known.

If you use gasohol in a Marvel-Schebler® MSA carburetor you must do so at your own risk. Marvel-Schebler Aircraft Carburetors, LLC does not recommend or approve the use of gasohol in its carburetors at this time.

Marvel-Schebler Aircraft Carburetors LLC