

WEBA Technology Corp

Antifreeze Additive Packages

WEBA Corp has developed high performance additive systems for blending antifreeze/coolants that cover the whole range of industrial and institutional specifications. Our additive packages allow the finished fluid manufacturer to make everything from automotive to diesel antifreeze; from conventional to Organic Acid Technology (OAT) extended life antifreeze. In all cases either ethylene or propylene glycols can be used as the base. All the WEBA Corp METALGUARD "A" series antifreeze additive packages inherently provide corrosion prevention, fluid longevity, consistent finished product quality and ease of blending. WEBA Corp's comprehensive technical expertise and customer support services will assist with problems, the pursuit of new business and new product development.

METALGUARD A70 is Formulated to meet these Industry Standards

- ASTM D 3306
- ASTM D 4985
- TMC of ATA RP 302A

Nearly all of OEM automotive light-duty and heavy-duty specifications are patterned after or identical to the ASTM standard specifications given above. For individual OEM specification compliance contact your sales representative. Note that the ASTM specifications listed include the key performance tests (ASTM D1384, D4340, D1881, D2570, D2809)

Technical Support

WEBA Corp can answer questions about ASTM standards and industry specifications as well as help with many other questions relating to antifreeze and glycols. To confirm that your finished products meet the required industry specifications, WEBA Corp's laboratory will help you with problem solving and testing associated with any products containing our inhibitor package.

Quality Control

WEBA Corp additive packages are tested for conformance with product specifications and industry standards. A laboratory analysis is conducted for all production lots and shipments and a certificate of analysis is available to customers who require them.

METALGUARD® A70

Universal Antifreeze Additive Packages for use with Ethylene and Propylene Glycol

Description and Applications

METALGUARD A70 is more than just a universal additive package which meets both automotive and heavy-duty specifications. It utilizes proprietary technology to provide superior performance quite economically and possesses several advantages associated with organic extended life additive packages, including lower dissolved solids levels and the absence of sometimes objectionable inhibitor components. Aside from being a non-silicate, non-phosphate, non-nitrate, non-amine one-part inhibitor package, METALGUARD A70 minimizes cold weather additive package crystallization problems since it does not begin to crystallize until the temperature falls below 32°F. In addition, it contains additives to minimize hot surface scaling while also preventing heat transfer surface fouling due to minor oil leakage.

METALGUARD A70 additive package produces antifreeze that meets ASTM D 3306, the specification for light-duty and automotive service and ASTM D 4985, the specification for diesel and other heavy-duty applications. METALGUARD A70 can be used effectively with either ethylene or propylene glycol. This universal additive system can also be used with either virgin or high-quality reclaimed glycol from distillation units, reverse osmosis membranes, and most flocculation/filtration systems. WEBA Corp recommends that you send a sample of any non-virgin glycols that you are considering for use with any of WEBA Corp's additive packages; we will determine if any pretreatment will be necessary prior to blending antifreeze to ensure compliance with all required specifications.

METALGUARD A70 can be used effectively with either ethylene or propylene glycol. This universal additive system can also be used with either virgin or high-quality reclaimed glycol from distillation units, reverse osmosis membranes, and most flocculation/filtration systems. WEBA Corp recommends that you send a sample of any non-virgin glycols that you are considering for use with any of WEBA Corp's additive packages to a laboratory for testing and forward the results to us. We will help you determine if any pretreatment will be necessary prior to blending antifreeze to ensure compliance with all required specifications.

Typical Product Specifications

As concentrated METALGUARD A70 inhibitor package:

Visual	Clear to cloudy, light yellow liquid
Specific Gravity @ 60°F	1.050-1.072
pH	13.0-14.0

As concentrated Antifreeze (made with EG and METALGUARD A70):*

Specific Gravity @60°F	1.110-1.125
pH	10.0-11.0 (ASTM 7.0-11.0)
Reserve Alkalinity	10 ml min.
Freeze Point	-34°F max. (diluted to 50% with water)

*Specifications available by request for propylene glycol base.

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METALGUARD A70

Blending and Use Instructions

Storage and Blending: Always store concentrated METALGUARD A70 additive package at a temperature of 60°F or higher. To make antifreeze concentrate, first charge the desired quantity of glycol to the blending tank. The glycol should first be charged to the blending vessel at a temperature of 50°F or higher, and at a pH of 7.0-9.5. Maintain this temperature throughout the blending procedure. Based on the quantity of glycol being treated, add 2.2% by volume of METALGUARD A70 while agitating or circulating glycol (two 55 gallon drums per 5,000 gallons of glycol). Continue to agitate for 30 minutes after all of the additive package has been transferred into the blending vessel.

Water Quality And Dilution: When antifreeze concentrate is diluted to 50% by volume with water, the water of dilution must be of acceptable quality. Deionized water is the best to use, but other sources of water are acceptable as long as they contain no more than 350 ppm total hardness measured as calcium and magnesium compounds. Higher hardness levels may cause excessive inhibitor consumption, scale deposits and metal pitting.

Making Claims for Antifreeze/Coolant Blended with WEBA Corp's Additive Packages

The specifications listed in this bulletin are based on antifreeze produced with WEBA Corp's additive packages, virgin glycol and deionized water. Antifreeze blenders must demonstrate compliance with ASTM or other specifications with their antifreeze/coolant, because the quality of the glycol and water used is as important as the additive package. Note that OEM's have placed limits on the percentage of recycled glycol that can be used in factory fills as have other purchasers of antifreeze. Glycol quality specifications have also been established. Obtain copies of the specifications that you wish to meet, thoroughly read them and conduct any required tests, prior to stating that the antifreeze produced meets the specifications. WEBA Corp can provide assistance locating the necessary specifications/standards. To confirm that your finished products meet the required industry specifications, WEBA Corp recommends that you test your glycol and finished products at an accredited laboratory. Glycol should be tested for conformance with ASTM E1177 and finished products should be tested for the ASTM performance tests listed on this product bulletin. WEBA Corp can assist your company in preparing your samples for testing with pre-tests performed at the accredited laboratory. WEBA Corp will warrant our additive packages only if the recommended blending procedures are properly followed. In addition, the glycol or other base fluid used with our additive systems must meet industry or ASTM standards unless specifically exempted in our literature.

Technical Contact Information

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