METALGUARD A65P

Heavy-Duty Extended Service Coolant Inhibitor Package Supplemented with Phosphate

Overview

METALGUARD A65P is a fully-formulated, extended service additive package that offers outstanding aluminum corrosion control in addition to protection for copper, brass, solder, steel and cast iron. A65P's substantial nitrite content will also control pitting/cavitation damage to diesel engine wet sleeve cylinder liners.

When blended with ASTM antifreeze grade ethylene glycol/water in accordance with WEBA's blending instructions, METALGUARD A65P will produce an antifreeze concentrate which contains a minimum of 2400 ppm nitrite. It is borate and 2-ethylhexanoic acid free but contains a low concentration of silicate to meet ASTM D4985.

METALGUARD A65P contains the same ingredients and has the same properties as WEBA's METALGUARD A65, except that phosphates are used instead of borates in the pH buffering and corrosion inhibition system. In the European Union (EU) sodium borates have been re-classified as reproductive toxins, Category 1b. This re-classification imposes new safety and operational requirements that make it impractical to use borates in coolant in the EU. In the USA, sodium borates have remained classified as a Category 2 reproductive toxin and will continue to be used as a coolant ingredient.



Features & Benefits

- Borate, 2EHA and amine/triethanolamine free.
- Includes pre-charge of SCA, with minimum of 2400 ppm nitrite in antifreeze concentrate.
- Low-silicate formulation to meet ASTM D4985.
- Contains anti-scalants and dispersants to prevent scaling and fouling of heat exchange surfaces.
- Can be blended with ethylene, propylene glycol or glycerin bases.
- Formulated to buffer pH when used with highquality distilled glycols meeting ASTM E1177.
- On-Road Service Life: 600,000 miles with an additive booster as needed.
- Off-Road Applications 12,000 hours or 6 years whichever comes first.



Specifications

Formulated to meet:

- ASTM D3306
- ASTM D4985
- ASTM D6210
- TMC of ATA RP 329/338



Industry Applications

Used to make antifreeze/coolant for

- On-Road Heavy-Duty Diesel Trucks
- Gas and Oil Field Industrial Coolant
- Selected Light-Duty Applications



Quality Control & Technical Support

WEBA's products must pass rigorous quality control tests. They are tested for conformance with product specifications and industry standards. Certificates of analysis are provided with every shipment. WEBA Technology can help with many technical questions relating to the finished fluids our additives create, types of glycol and other bases, and assist with issues on products containing our inhibitor packages.





info@webacorp.com www.webacorp.com



500 Cummings Center, Suite 6050 Beverly, MA 01915 USA +1 812-822-3658

METALGUARD® A65P



Product Specifications

METALGUARD is a registered trademark and may only be used with permission.

As concentrated inhibitor package:

Visual	Clear to slightly cloudy, clear to amber liquid
Specific Gravity; 70°F/21.1°C	1.170-1.180
pH	11.5-12.0
As antifreeze concentrate, ethylene glycol base:	
Specific Gravity; 70°F/21.1°C	1.110-1.145
pН	9.5-10.5
Reserve Alkalinity	6 ml min
Freeze Point @ 50%	-34°F (-36°C) max.



Blending & Use Instructions

Blending: Upon opening the drum of additive, stir thoroughly. Do not use high speed agitation. If you use only a portion of the drum (i.e. a few gallons at a time) you need to mix the drum of additive prior to pulling out the required amount. If you use the entire drum to make a bulk blend you do not need to mix the drum prior to use.

To make antifreeze concentrate: First charge the desired quantity of glycol to the blending tank. Heat the glycol to 50°F (10°C) or higher. Maintain the minimum temperature throughout the blending procedure. Good agitation is vital to making a consistent and proper product; agitate for 30-60 minutes after the addition of the additive package. **Use Rate:** Based on the quantity being manufactured, add 2.2% by volume of the additive package.

To make Premix: Option 1: dilute concentrate 50% by volume. Option 2: If you are making premix (ready-to-use) from scratch, the METALGUARD additive, dye and bitterant are considered part of the water portion. The concentration (percentage) of water will need to be adjusted to achieve a proper freeze point as required by ASTM D3306. **Use Rate:** Based on the quantity being manufactured, add 1.1% by volume.

Antifoam: Add the appropriate amount of antifoam to allow your product to pass a foam test. Use 0.01% by volume or 0.5 gallon (1.90L) per 5000 gallons (18,925L) of antifreeze concentrate (0.25 gallons/10.95L in 50/50). More may be needed depending upon glycol-base quality. Antifoam may be purchased in 5-gallon (18.93L) pails from WEBA Technology.

Dye: As the last step add the color of dye that you wish to use. If you need help determining dye colors or use rates you may contact us.

Testing: Test your finished product to be sure it conforms to specifications. See below paragraph on quality control.

Storage: Store concentrated additive packages above 60°F (15.5°C). If a container arrives cold to your warehouse, immediately place it in a hot room for 1-2 days then stir thoroughly prior to use. Alternatively, heating blankets may be used (follow local regulations regarding their usage) Once a container is opened there is a possibility of the liquid phase evaporating, so close the container tightly after each use. High temperatures, above 100°F (38°C) for an extended duration, may also cause degradation of the inhibitors. If you are in an area of the country with continuous high heat, store the additive in a cooler area of your warehouse.

Water Quality And Dilution: When antifreeze concentrate is diluted with water, the water for dilution must be of acceptable quality. Deionized water is the best to use, but other sources of water are acceptable if they meet the water quality limits outlined in both ASTM D3306 and ASTM D6210.

Quality Control Procedures: WEBA strongly recommends that all antifreeze producers have an internal, complete quality control program in place for manufacturing and testing of all products made for sale. It is recommended that antifreeze/coolant be inspected at 90-day intervals to detect any obvious contamination, phase separation, cloudiness, precipitation or significant pH change. A full analysis of coolant is recommended at least every 300,000 miles, or when visual, pH checks or other monitored physical properties indicate a problem.

The specifications listed in this bulletin are based on products produced with WEBA's additive packages, virgin glycol and deionized water. To confirm that your finished products meet the required industry specifications, WEBA recommends that you test your glycol and finished products at an accredited laboratory. WEBA will warrant our additive packages only if this procedure and the recommended blending and storage procedures are properly followed and documented. In addition, the glycol or other base fluid used with our additive systems should meet industry or ASTM standards unless specifically exempted in our literature.