



Valvoline ZEREX™ G-93-94 corrosion inhibitor concentrate is added to the cooling water of internal combustion engines requiring no freeze protection. At a concentration of 10% by volume, Valvoline's ZEREX™ G-93 affords excellent protection against cavitation and corrosion to all metals and alloys commonly used in automotive cooling systems. Aluminum, ferrous metals, and yellow metals are well protected.

Valvoline ZEREX™ G-93 also prolongs the working life of water pumps and heat exchangers. It is primarily intended for applications in heavy duty MTU diesel engines. Such engines are common in marine and industrial applications.

The coolant mixture should be prepared with tap, demineralized or deionized. The dilution water should be a clear and free of suspended matter or solids. It should also have minimal hardness. Salt water, sea water, or industrial waste water should not be used. The analytical characteristics of the water should be within the water quality table guidelines for hardness, chloride and sulfate content. The water should be treated by suitable means if it does not fulfill the stated requirements.

Valvoline ZEREX™ G-93 is approved by MTU.

Call 1-800- TEAM-VAL with questions.

Valvoline recommends that spent coolant never be disposed of by dumping into a septic system, storm sewer or onto the ground. Instead, contact your state or local municipality for instructions on where to and how to properly dispose of this coolant and protect our environment.

If any coolant is spilled onto the ground, contain the spill and call the state authorities and ask for proper instruction on how to clean up the spill.

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The information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this bulletin are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory prior to use. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material. Freedom to use any patent owned by Ashland or others is not to be inferred from any statement contained herein.

ZEREX™ G-93 Corrosion Inhibitor Concentrate

ZEREX™ G-93 Water Quality Table	
Water Hardness	0-25° Clark (0-3.6 mmol/l)
Chloride Content	<100 ppm
Sulfate Content	<100 ppm

Typical Physical Properties	
Appearance	Green liquid
Density, 20°C	1.096
Boiling Point	226.4°F
Flash Point	>248°F
Reserve Alkalinity (5g of product)	12.5 ml
Water content	48.2 wt %
pH	9.5
Refractive index, 20°C	1.4010
Water miscibility	complete
Freezing point – concentrate	-34°F
Freezing point – 10 wt %	32°F

Technical Data	
Foaming, 10%, ASTM D1881	
Volume, ml	max 70
Break Time, sec	max 5
Rubber swelling	0-3% SBR/EPDM equivalent to water
Corrosion Tests – 10% v/v	
ASTM D1384 – all alloys	< 0.2 mg/cm ² loss
ASTM D4340 – aluminum alloy	< 1 mg/cm ² /wk
Shelf life	5 years, unopened

This information only applies to products manufactured in the following location(s): USA

Part #	Product
ZXG935	ZEREX HD G-93 Coolant 5 GAL Pail

