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# ACU3000-NOAT Three-Way Antifreeze Specifications & Instructions

**3001MR \* 3004 \* 3050R \* 3100MR**

**Please read all instructions and safety information prior to using product.**

## Introduction

The ACU3000 series of three-in-one test strips offer unsurpassed accuracy in providing a total quality management system for your engine. These strips measure the concentration of antifreeze coolant inhibitors in NOAT cooling systems. Fast and accurate results of nitrite, freeze point and pH are easily determined. Recommended service action is based on the engine and supplemental inhibitor manufacturers' specifications. Regular testing of antifreeze coolant minimizes downtime and its associated cost. Antifreeze coolant inhibitors depletion rate is affected by variations in formulas, maintenance schedules, blow by gases, topping off, and other atypical conditions found with the use of heavy-duty diesel and gasoline engines.



## Availability

Product	Nitrite	Glycol	pH	Quantity
ACU3001MR-2	0 - 4000 ppm	0 - 60%	< 7.5 – 11 +	2 btls of 50 ea
ACU3001MR-C	0 - 4000 ppm	0 - 60%	< 7.5 – 11 +	12 btls of 50 ea
ACU3004	0 - 4000 ppm	0 - 60%	< 7.5 – 11 +	25 pkts of 4 ea
ACU3050R	0 - 4000 ppm	0 - 60%	< 7.5 – 11 +	50 strips with kit
ACU3100MR	0 - 4000 ppm	0 - 60%	< 7.5 – 11 +	100 strips with kit

\* The ACU3000-NOAT Series Kit is complete with vial and syringe.

Material Data Safety Sheets for our products are available at: [www.acustrip.com/msds.html](http://www.acustrip.com/msds.html)

Please note that the [ACU3000](#) is the appropriate three-way product for use with Conventional Coolant.

## General Procedures

Test antifreeze coolant before maintenance is performed. The test strips should be used by the date on the packaging. For best results:

- Start with clean, dry hands and utensils.
- Run test in a well-lit area using natural light if possible.
- Collect coolant sample from the radiator or petcock. DO NOT collect from the coolant recovery or overflow system. Antifreeze coolant sample should be between 40° and 110° F. Room temperature is preferred.
- Follow the enclosed test procedure on the back of the color chart.
- Dip the reactive (pad) end of the test strip into the antifreeze coolant.
- Test again if drain half or drain all maintenance is performed.
- If the result falls between colors, select the block in between.
- Read the color of the test strip after one but not more than after 3 minutes. (The pad's color will change as the pad dries).
- Below 50° F read the color after 2 but before 5 minutes.
- Use the test strips by the expiration date on the bottle.
- Fresh nitrite test pads are light yellow and freeze point test pads are dark yellow. If light brown, do not use. pH test pads are red.
- Discoloration is caused by exposure for long periods above 100°F, direct sunlight, or leaving the bottle caps open for an extended period of time.
- Replace cap on the test strip bottle to protect from moisture.
- On occasion the dye in your antifreeze coolant may interfere with an exact match on the color chart. If this occurs, select the best match by color shade or depth. With practice, you will gain confidence and proficiency with the test strips.

## Specific Procedures

- Dip one test strip into coolant sample that is below 110°F for two seconds, remove and do not shake.
- Hold strip level and match color for Freeze Point (middle pad), then for pH (pad nearest handle).
- After one minute match nitrite (end pad) color.
- **IMPORTANT:** Store bottle away from direct sunlight and below 90°F. Keep cap securely closed. For best results use by date on bottle.

PPM Nitrite (end pad)	Freeze Point (middle pad) °C      °F	pH (pad nearest handle)
<<200	0°      32°	6.5
<200	-16°      4°	7.0
800	-23°      -10°	8.0
1200	-37°      -34°	9.5
4000	-51°      -60°	above 11

**NOTE:** We recommend a conservative approach to the maintenance of systems containing mixtures of coolants and/or SCAs. We specifically recommend that the user evaluate the nitrite concentration and freeze point using ACUSTRIP Three Way Heavy Duty Test Strips. Always maintain pH, nitrite concentration and freeze point within the engine manufacturer's specification. Typically 7-9 pH, 1200-6000 ppm nitrite and 50% glycol is widely considered normal.



### **SAFETY WARNING: REMOVAL OF RADIATOR CAP IS DANGEROUS**

Radiators are under pressure. Hot coolant under pressure can cause severe burns. Do not remove the radiator cap on a hot engine. Wait until the temperature is below 50° Celsius (120° Fahrenheit) before removing the cap. Failure to wait may result in personal injury from hot coolant spray or steam. Remove cap slowly to relieve all pressure.

**Dispose of your used test strip with normal paper waste.  
Dispose of your used antifreeze coolant in accordance with local regulations.**