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**SUBJECT: Hercules' Cryo-Tek -100AL Antifreeze Use in Series 1 & 2 Ultra Gas Boilers**

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Weil-McLain has recommended a number of manufacturers whose antifreeze products are formulated for aluminum heat exchangers, including Hercules Cryo-Tek -100AL for the Series 1 and Series 2 Ultra Gas boilers.

Our current Series 3 Ultra Gas boiler, released in July 2008, does not currently list Cryo-Tek -100AL as a recommended brand (Series 3 recommended list is on our web site, in the Ultra Series 3 boiler manual, page 71).

In regards to Ultra Gas Series 1 & 2 boilers, please review the enclosed May 5, 2008 technical bulletin issued from Hercules which urged customers to return all unopened containers of "old" Cryo-Tek -100AL (product #35283 only) product due to some field related issues. The bulletin continued to explain that an upgraded formulation was now available for reorder (same product number).

Following Hercules' recommendations, all existing installations of Ultra Gas **Series 1 & 2 boilers containing the older Cryo-Tek -100AL formulation** should be checked for pH levels.

- If the pH level is between 7.0 and 8.5, the system will function properly and no further action is necessary.  
Contractors *must* coordinate reimbursement, for checking pH levels, with a Hercules representative (place of original antifreeze purchase), using the enclosed claim form.
- If the pH level is above 8.5, they recommend the system be cleaned, flushed, and recharged with the appropriate amount of the upgraded formulation.  
Contractors *must* coordinate reimbursement with a Hercules representative (place of original antifreeze purchase), using the enclosed claim form.
- If the pH level is below 7.0, action should be taken to raise the pH to the normal operating range of 7.0 to 8.5. Hercules recommends to either add Hercules Cryo-Tek -100AL inhibitor (Stock Number 35274) as directed, or drain and flush the system followed by addition of the upgraded antifreeze. Hercules will not reimburse for this scenario (other than reimbursement for checking the pH level), as it is normal for a system to become acidic over time and addressing it should be a part of standard periodic maintenance procedures.

We continue to advise all of our customers that are using antifreeze in a system, regardless of the manufacturer, to test the system annually, always clean a system before filling with antifreeze, and monitor makeup water in the system.

For further details regarding the Hercules bulletin, please contact Hercules directly.

*Enclosures:*

(1) Hercules Urgent Technical Bulletin for Cryo-Tek -100AL (Product #35283 Only), Dated May 5, 2008

(1) Hercules Claim Form (Cryo-Tek -100AL)



## **Urgent Technical Bulletin**

May 5, 2008

**For Cryo-Tek® -100 ALUMINUM**

**This bulletin applies only to**

**Cryo-Tek -100 AL      Product #35283 ONLY**

*Cryo-Tek -100 AL was introduced to the market in 2003. As would be expected for a Hercules product, it has performed extremely well in the vast majority of heating system installations utilizing aluminum heat exchangers. Nevertheless, for complex reasons we have had reports of difficulties in some systems that have installed the product. Some issues seem to relate to inconsistencies in the aluminum heat exchangers used in all three major brands of boilers, and **others have to do with raised levels of pH. Since we do not have the maintenance records on these boilers (both Hercules and Boiler Manufacturers recommend that pH in these systems be checked annually), it has become difficult to analyze any of these situation to come to any conclusions.***

**In an effort to minimize these situations,** we have now reformulated Cryo-Tek -100/AL to work in a wider range of boiler tolerances. The new Cryo-Tek-100/AL is GUARANTEED to perform exceptionally well regardless of any reasonable variations within the boiler products themselves. The new formulation contains enhanced stabilizers which will keep the pH as stable as possible, while retaining the Hercules exclusive Triple Protection package.

*There has also been some confusion about the allowable temperature range for Cryo-Tek -100 AL. **Both the old product and the new product have an operating range to 250 °F** (the operating range previously indicated was understated). The new product is labeled with the correct range, and new printed materials will be available ASAP.*

**In order to get this new formulation on the market as quickly as possible, we are asking the following:**  
**Effective immediately all unopened "old" units of 35283 should be returned to Hercules for full credit.**

New product should be reordered using the same item number. Be assured that no old material remains in the DC's so any material you reorder will be the new fresh material

No **old** product will be shipped from any Distribution Center. ***New product will be appropriately labeled with a vertical label on the pail showing changed specifications.***

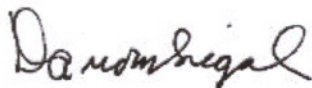
We have heard of a small number of radiant systems where clogged laterals have occurred. We will provide material and instructions for clearing clogged lines, and we will reimburse reasonable labor expenses. Please contact your Regional Manager for reimbursement guidelines.

**We will furthermore guarantee satisfaction with the newly formulated product when it is installed and maintained per the package and spec sheet instructions. This guarantee is unique in the industry and again will cover both labor and materials.**

Lastly, we know that there have also been issues with our product not being included on the boiler manufacturers "recommended" lists. We strongly believe our previous product was as good as competitive products (some of these issues have affected competition, too), and our revised product is even superior to that.

***As explained above, we will totally guarantee the performance of the new product to the extent of labor and material.***

We apologize for this inconvenience and thank you in advance for your assistance in resolving this situation to the full satisfaction of our customers. Please contact Wayne Merrifield, our Technical Director in Passaic, or Donna Bristow in Passaic Customer Service for any questions you may have that are not fully answered in this Bulletin.



Hercules Chemical Company Inc.  
David M. Siegal  
President





**Hercules Chemical  
Company Inc.**

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**Claim Form  
cryo-tek -100/Al**

Please complete this form and either fax or mail it to:

Hercules Chemical Company Inc.

Attn: cryo-tek Liaison

111 South St.

Passaic, NJ 07055

FAX: 973-777-4115

Please remember to attach an invoice for reimbursement of services performed.

**Plumber / Contractor**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

ST: \_\_\_\_\_

Zip: \_\_\_\_\_

Is above address where reimbursement should be mailed:

☐ YES

☐ NO -

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

ST: \_\_\_\_\_

Zip: \_\_\_\_\_

Services Performed:

☐ pH Tested Value: \_\_\_\_\_ (pH)

☐ System Flushed - Date: \_\_\_\_\_

Attach copy of invoice for services performed.

Replacement amount needed of cryo-tek -100 AL: \_\_\_\_ Gallons

**Ship Replacement to:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

ST: \_\_\_\_\_

Zip: \_\_\_\_\_

Comments or questions contact customer service at 973-778-5000