

**HEMOTEMP II INDICATOR USE**

- St. Joseph Medical Center Tacoma, WA   
  St. Clare Hospital Lakewood, WA   
  St. Elizabeth Hospital Enumclaw, WA  
 St. Francis Hospital Federal Way, WA   
  St. Anthony Hospital Gig Harbor, WA   
  Highline Medical Center Burien, WA   
 PSC

**PURPOSE**

To provide instruction for use of HemoTemp II temperature indicators, which are used to monitor temperature of blood components while out of controlled storage.

**BACKGROUND**

HemoTemp II Indicator is a core correlated combination irreversible liquid crystal blood temperature indicator and a reversible liquid crystal thermometer for blood during transit and storage outside the blood bank. It is calibrated to display the internal core temperature of the blood between 1-9C under ambient conditions (18-26C) and is accurate to ± 0.5C.

**RELATED DOCUMENTS**

- R-PO-TS0303      Blood Component Storage and Transport  
 R-W-TS0403      Packing Blood Components for Transport

**FORMS / MATERIAL**

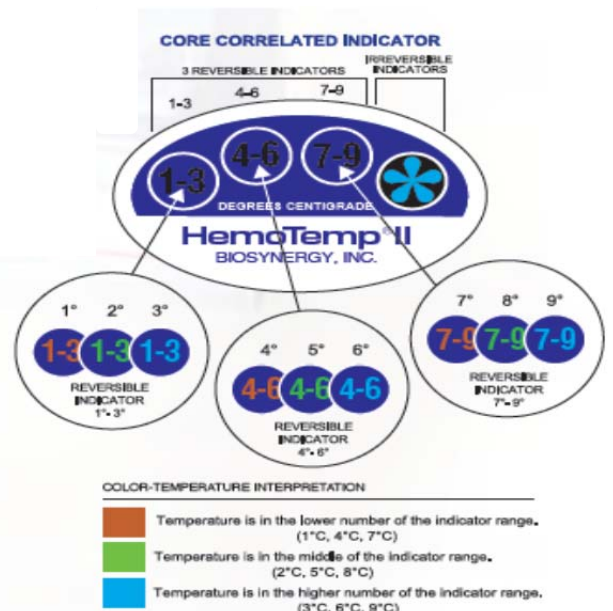
- Blood Component Transport and Issue Log  
 HemoTemp II Temperature Indicators  
 HemoTemp II Activator

**DESCRIPTION**

Flower in the far-right circle = Irreversible color-temperature interpretation depends on the presence or absence of blue color. If it is not blue (i.e., gray or brown), it has exceeded the acceptable temperature range. It will never turn blue again even if put back in the refrigerator. The unit must be discarded.

All other circles = Reversible color-temperature interpretation If the temperature is in range, one of these circles will display a number range. Interpretation depends on both color and number.

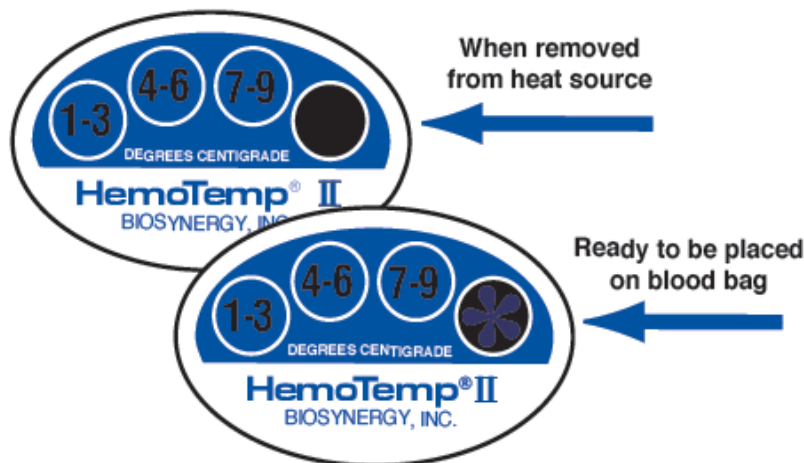
- Red/Tan: Temperature is the lowest number of the displayed range (1, 4, or 7)C
- Green: Temperature is the number in between the two displayed numbers (2, 5, or 8)C
- Blue: Temperature is the highest number of the range. (3, 6, or 9)C
- If no numbers are visible, the temperature is above 9C or below 1C



## STEPS

Hemotemp II indicators will be placed on all red cells that are transported by cooler to any clinical unit such as the ER or the OR.

1. Pull strip from box and tear off individual HemoTemp II Indicators at perforation (leave backing on). The irreversible "flower" portion at the right side of the sticker will be a non-blue color under ambient conditions (18-26°C).
2. Place indicator in HemoTemp II Activator (irreversible "flower" portion down) for at least 60 seconds.  
**Note:** The indicators may be stored in the HemoTemp II Activator set at 38-42°C for 3 to 4 weeks. Do not exceed this time period.
3. Remove an indicator from the HemoTemp II Activator.
4. As soon as the irreversible blue "flower" portion is seen, remove the backing on the indicator and press it onto the center or near the bottom of the refrigerated blood bag. The indicator has now been activated. See graphic below.



5. Place the blood bag with the face of the indicator down on a flat (not heated) surface and rotate the bag back and forth to insure proper adhesion.
6. Check the color of the irreversible "flower" on the indicator. If it is not blue in color, the indicator has not been properly activated. **Once placed on bag the indicator is good for 48 hrs.** To ensure the 48 hour time duration, the blood bag should be stored at 3°C for at least 10 hours prior to activation of the HemoTemp II indicator.

**Note:** Please note when using HemoTemp II that the irreversible "flower" portion is dependent on both TEMPERATURE and TIME at that temperature. For example, if you expose an ice cube to an environment of 40°F it will take a longer time to melt than if exposed to 70°F (time/ temperature).

7. Place the blood bag with the indicator back into a controlled environment. For calibration leave in controlled environment to ensure the blood bag and indicator have equilibrated.

## REFERENCE

Manufacturer's Package Insert, HemoTemp II User Guide, BioSynergy, Inc, Elk Grove Village, IL.

**DOCUMENT APPROVAL Purpose of Document / Reason for Change:**

To create a document that describes the use of the HemoTemp II temperature indicator will be replacing the Safe-T-Vue indicator.

No significant change to process in above revision. Per CAP, this revision does not require further Medical Director approval.

<b>Committee Approval Date</b>	<input checked="" type="checkbox"/> Date: 12/11/2014 <input type="checkbox"/> N/A – revision of department-specific document which is used at only one facility	<b>Medical Director Approval</b> (Electronic Signature)	 12/5/14
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For Training Purposes Only