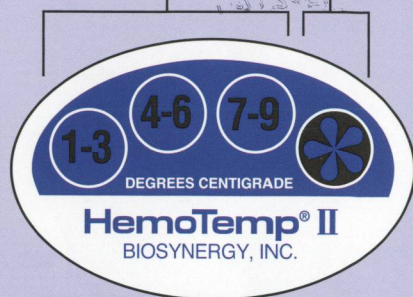


Users Guide

IMPORTANT Read Before Using Indicators

3 REVERSIBLE WINDOWS IRREVERSIBLE "FLOWER"



BIOSYNERGY, INC.

1940 East Devon Avenue • Elk Grove Village, IL 60007
800-255-5274 / 847-956-0471
e-mail: biosynergy@att.net
www.biosynergyinc.com

Patent No. 4,859,360

© 9/13/2012

Improved Sensitivity New 48 Hour Duration

For Proper Activation of the HemoTemp® II Indicator

- 1 The indicator must be heated to 38-42°C for at least 60 seconds. Biosynergy strongly suggests using the HemoTemp® II Activator.
- 2 After removing the indicator from the heat source, it must be placed on the 1-3°C blood bag as soon as you see the blue "flower".

IMPORTANT - MUST READ

The blood bag should be stored at 1-3°C for at least 10 hours prior to activation of the HemoTemp® II indicator. For proper time duration of the HemoTemp® II indicator, the blood bag should be maintained at 3°C. When blood is removed from the refrigerator and placed on a counter top, the blood needs to be protected from the ambient temperature of the room. **IF NOT, the blood will warm to 6°C in minutes and may lead to improper time duration of the HemoTemp® II indicator.**

**FOR TECHNICAL ASSISTANCE
PLEASE CALL OUR TOLL-FREE NUMBER:
800-255-5274**

Indicator Activation, Application and Directions



Please note: The indicator must be heated (**to 38-42°C for 60 seconds**) and placed on a refrigerated blood bag (between 1-3°C) for proper activation.

To heat the HemoTemp® II Indicators, place the indicators (irreversible "flower" portion down) into the HemoTemp® II Activator.

DO NOT USE A MICROWAVE OVEN. DO NOT STORE INDICATORS DIRECTLY IN WATER.

1. Pull strip from box and tear off individual HemoTemp® II Indicator at perforation (leave backing on). The irreversible "flower" portion will be a non-blue color under ambient conditions (18-26°C). **Place indicator in HemoTemp® II Activator for at least 60 seconds.**

2. Remove an indicator from the HemoTemp® II Activator. As soon as you start to see the irreversible blue "flower" portion 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.**



IMPORTANT Before applying HemoTemp® II Indicator to a blood bag, make certain the blood bag (100 gm-500 gm) has been refrigerated at (1-3°C) for at least 10 hours and wiped free of moisture and oil for proper activation.

Product Description

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.

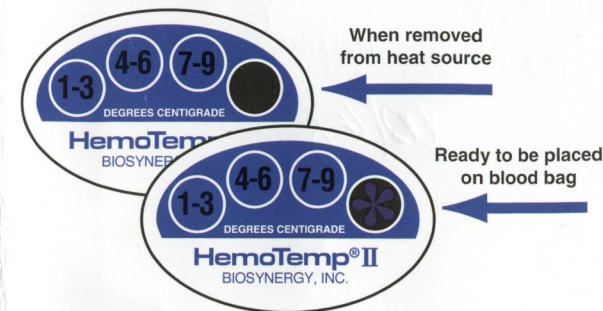
The **Reversible** portion of the HemoTemp® II acts as a blood bag thermometer. It is calibrated to display the internal core temperature of the blood between 1-9°C under ambient conditions (18-26°C) and is accurate to ± 0.5°C. If the blood temperature falls below 1°C or rises above 9°C, no numbers will be visible.

The **Irreversible** portion of the HemoTemp® II Indicator "flower" warns when the core temperature of the blood has exceeded approximately 6-10°C. After being activated, the irreversible window retains a blue color for **48 hours** if the blood is stored at 3°C and longer if the blood is stored at lower temperatures. If stored at 6°C, the irreversible window will remain blue for ten hours. As the blood is warmed, the irreversible indicator changes from BLUE to light blue, to a non-blue color, then gray and finally to a brownish color. **INTERPRETATION OF THE IRREVERSIBLE INDICATOR DEPENDS ON THE PRESENCE OR ABSENCE OF A BLUE COLOR.** When the internal core temperature of the blood is approximately 10°C ± 0.5°C, the indicator will lose its blue color. The length of time during which the irreversible indicator retains a blue color decreases as the temperature increases. After the irreversible indicator has lost its blue color it **will not return to blue even if the blood bag is subsequently cooled again.**

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**).

3. 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.
4. Check the color of the irreversible "flower" on the indicator, **IF IT APPEARS NON-BLUE, THE INDICATOR HAS NOT BEEN PROPERLY ACTIVATED**
5. 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.

The indicators may be stored in the HemoTemp® II Activator (#9000), set at 38-42°C for 3 to 4 weeks. Do not exceed this time period.



Biosynergy's Family of Products



- HemoTemp®** for Reversible Blood Bag "Core" Temperature Monitoring
- HemoTemp® II** for Irreversible/Reversible Blood Bag "Core" Temperature Monitoring
- HemoTemp® II Activator** for precisely accurate heat activation of the HemoTemp® II Indicator.
- StaFreez®** for Irreversible Freeze-Thaw Temperature Monitoring
- LabTemp®** for Reversible Surface Laboratory Temperature Monitoring
- TempTrend®** for Reversible Surface and Urine Temperature Trend Monitoring
- TempTrend® II** for Forehead "Core" Temperature Trend Monitoring
- Hemo-Cool™ Jr. II** for Thermoelectric Blood Cooling and Transport System