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HEMOTEMP® II BLOOD BAG TEMPERATURE INDICATOR

The HemoTemp® II indicator is a combination reversible/irreversible liquid crystal blood temperature indicator developed and manufactured by Biosynergy, Inc. HemoTemp® II is a time/temperature dependent indicator. For example, once activated (heated and then placed onto a 3°C blood bag) the irreversible portion of the indicator changes its color as a result of both an increase in blood temperature and the length of time the blood remains at that temperature. Since blood should be stored at 1-6°C, but in no event exceed 10°C, Biosynergy has developed this irreversible indicator to indicate whether a blood unit has been exposed to an unsafe temperature for an extended period of time. **Thus, HemoTemp® II gives its users the current temperature of the blood at a glance as well as a time/temperature history of the blood unit.**

The reversible portion of HemoTemp® II indicator acts as a blood bag thermometer. It is calibrated to display the internal temperature of the blood bag 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 warns when the core temperature of the blood has exceeded approximately 6-10°C. To activate this portion of the indicator, the indicator is heated and then applied to a refrigerated blood bag (approximately 3°C). After being activated, the irreversible indicator retains a blue color for at least 48 hours if the blood is stored at 3°C. As the blood is warmed, the irreversible indicator changes color

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. After the irreversible indicator has lost its blue color, it will not return to blue even if the blood is subsequently re-cooled, indicating that the blood has been warmed.

The length of time during which the irreversible indicator retains a blue color decreases as the temperature increases. For example, the irreversible indicator retains a blue color for at least 48 hours at 3°C, but only for approximately 10-12 hours at 6°C.

HemoTemp[®] II **CORE CORRELATED** indicator can be cost effective because it can **reduce blood waste, eliminate uncertainty about the temperature history of the blood, and eliminate the problem of breakage associated with the use of glass thermometers.** If you would like any additional information or a **free sample**, simply call our toll-free number, **800-255-5274** or email us at **biosynergy@att.net**.