



HEMOPET

11561 Salinaz Ave., Garden Grove, California 92843
Phone 714-891-2022 Fax 714-891-2123
Hemopet@hotmail.com www.Hemopet.org

VIABILITY OF STORED PACKED RED BLOOD CELLS

Hemopet's universal donor Packed Red Blood Cells (PRBC), blood type DEA 4, are suspended in red cell additive solution (Adosol,™ Fenwal Blood Technologies) to extend the shelf-life to at least 42 days. The additive preservative solution provides increased concentrations of dextrose and adenine for intracellular energy metabolism, and mannitol to diminish red cell lysis.

In order for the PRBC to be evenly exposed to and bathed in the nutrient solution, **the refrigerated blood pack should be mixed by gentle inversion several times each week during storage.** Otherwise, small crevices that typically form at the sides or bottom of the pliable plastic blood bag prevent some of the blood cells from receiving sufficient nutritional and energy support.

As we have had occasional units of PRBC turn black around the edges before the expiration date, failure to regularly mix the contents of the blood pack may be an important contributing factor. [These units showed no evidence of contamination, as bacterial cultures have been negative. Nevertheless, as a precautionary measure, PRBC units that appear black should not be transfused.]

Below are some additional handling suggestions to help maintain viable PRBCs:

Upon arrival, **remove the outer plastic shipping wrap and immediately refrigerate the blood products.** It is best if they are stored in a refrigerator that is opened minimally to maintain the proper temperature of no greater than 38° F.

The plastic bags are made with a special plasticizer so the surface can "breathe". Try not to store the bags too close together or on top of each other, as this limits the oxygenation of the blood surface areas.

The quality of our products is extremely important to us, and we hope that these suggestions will be helpful.