

The invention relates to cryobiology, namely to low-temperature preservation of erythrocytes, and can be used at hemotransfusion stations. A method for cryopreserving erythrocytes includes adding a cryopreserving agent, containing polyvinyl pyrrolidone of a molecular weight (m.w.) 12600 and bidistilled water, to an erythromass with the subsequent freezing and keeping at medium-low temperatures. The cryopreserving agent is supplemented with 1,2-propandiol, sucrose and sodium chloride, in what connection the erythromass is supplemented therewith in a ratio of (0,3-1):1 up to a final concentration of 1,2-propanediol in the supernatant of 23-42%, and the components are taken in the following ratio, %: 1,2-propanediol 35-75, polyvinyl pyrrolidone of m.m. 12600 8-16, sucrose 2-6, sodium chloride 0.4-0.9, bidistilled water the rest.