R.B.C. DILUTING FLUID

PRODUCT CODE - OT-16

INSTRUCTIONS FOR USE



INTENDED USE: Diluting Fluid for R.B.C.

SUMMARY AND EXPLANATION

It is used as diluting fluid for blood specimens to count red blood cells.

PRINCIPLE

RBC diluting fluid is isotonic with blood, hence hemolysis does not take place. Normal Saline also can be used. But it causes slight creation of red blood cells and allows rouleaux formation. The blood specimen is diluted 1:200 with the RBC diluting fluid and cells are counted under high power (40 x objective) by using a counting chamber. The number of cells in undiluted blood are calculated and reported as the number of Red cells per cu mm (MI) of whole blood.

REAGENTS

R.B.C Diluting Fluid

Sodium Sulphate Sodium chloride Mercuric Chloride

PRECAUTIONS

This product is for in Vitro diagnostics use and should be used by properly trained individuals. Precautions should be taken against the dangers of microbiological hazards by properly sterilizing specimens, containers and media after use. Directions should be read and followed carefully.

STORAGE

Store product in its original container at room temperature until used. Keep container tightly closed during storage.

PRODUCT DETERIORATION

This product should not be used if:

- 1. The color has changed.
- 2. The expiration date has passed.
- 3. There are other signs of deterioration.

MATERIALS REQUIRED BUT NOT SUPPLIED

- 1. Counting Chember.
- 2. R.B.C. Pipette.
- 3. Microscope with oil immersion lens.

SPECIMEN COLLECTION AND PREPARTION

Whole Blood or Blood with EDTA.

REAGENT PREPARATION: The reagent is Ready-To-Use.

PROCEDURE

- 1. Draw EDTA anticoagulated blood to exactly the 0.5 mark of the RBC pipette.
- Wipe the tip of the pipette, clean with a piece of dry gauge without touching the opening of the capillary and immerse in the freshly filtered diluting fluid.
- 3. Do not insert the pipette in the bottle of counting solution.
- 4. By gentle mouth suction, draw the diluting fluid steadily into the pipette to exactly the 11 mark past the bulb, rotating the pipette on its long axis to ensure thorough mixing of blood and diluent.

- 5. Immediately mix the contents of the pipette thoroughly by placing the thumb over one end and shake for 1 minute.
- 6. Fill the counting chamber carefully and and allow the cells to settle for 2- 3 minutes.
- 7. Count cells in all corner squares.
- 8. Diluted blood must be examined within 2 hours.

RESULTS AND INTERPRETATION

Red blood cells/mm3 in the original blood = Cell counted X dilution factor/Volume counted in mm

- = Cell counted X 200 /0.02mm3
- = Cell counted X 104

QUALITY CONTROL

All lot numbers R.B.C. Diluting Fluid have been tested and found to be acceptable. The patient sample can serve as quality control to verify the efficacy of the reagents.

BIBLIOGRAPHY

 Text book of Medical Laboratory Technology; Praful B. Godkar

SYMBOLS: Read Instruction for use In Vitro Diagnostic Use Only Manufactured by Expiry Date Storage Temperature

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