Fixative, for rapid fixing of haematological samples

**Intended Use:**
It is recommended for haematological or cytological staining of specimen.

**Composition**

**Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>100 ml</td>
</tr>
<tr>
<td>Acetone</td>
<td>600 ml</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>6.3 gm</td>
</tr>
<tr>
<td>Distilled water</td>
<td>300 ml</td>
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</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters**

**Directions**

1) Prepare thin film of desired haematological sample on clean dry slide.
2) Fix the wet smear with fixative reagent.
3) Stain as per desired protocol.

**Principle And Interpretation**

The purpose of fixative is to preserve the tissues as close to their living state as possible. It also prevent autolysis and bacterial attack. Fixative allows clear staining of sections subsequently and improve the optical differentiation of cells and tissues. Fixation results in denaturation and coagulation of protein in the tissues and also prevent tissues from changing their shape and size during processing. The fixatives have a property of forming cross links between proteins, thereby forming a gel, keeping everything in their in vivo relation to each other.

**Type of specimen**:
Haematological or Cytological samples.

**Specimen Collection and Handling**

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1, 2).

After use, contaminated materials must be sterilized by autoclaving before discarding.

**Warning and Precautions**:

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

**Limitations**:

1) If fixative is used in excess quantity, it may cause shrinkage and hardning of tissue.
2) Some fixative may have potential biohazards.

**Performance and Evaluation**

Performance of the product is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.
Quality Control

Appearance
Colourless liquid.

Clarity
Clear without any particles

Microscopic Examination
Cell Specimen are fixed using fixative and specific staining of fixed specimen is carried out. The stained slide is observed under microscope.

Results
Cell specimen are fixed and preserved.

Storage and Shelf Life
Store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Disposal
User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference