Fouchet's Reagent

Intended use
Fouchet's Reagent is used to test for bilirubin and some other derivatives.

Composition**

Ingredients
- Trichloroacetic acid: 25.00 gm
- Ferric chloride, 10% aqueous: 10.00 ml
- Distilled water: 100.00 ml

**Formula adjusted, standardized to suit performance parameters

Directions
To about 10 ml urine, add 1 gm barium chloride, mix and filter. Spread out on a filter paper. When it is partly dry, drop a little Fouchet's reagent or yellow nitric acid on the precipitate.

Principle And Interpretation
For testing bilirubin in urine, two types of tests are available namely,
1) oxidation test—where bilirubin is oxidised to green biliverdin and
2) diazotization test—where bilirubin is diazotised to a highly coloured compound.

Fouchet's reagent used in Fouchet's test comes under oxidizing reagent or test. Barium chloride precipitates the sulphate radicals present in urine to form precipitate of barium sulphate. If bile pigments are present in urine, they adhere to these molecules. Ferric chloride present in Fouchets reagent then oxidises yellow bilirubin, in the presence of trichloroacetic acid to green biliverdin. Therefore the development of green colour due to the formation of biliverdin indicates the presence of bilirubin (bile) in urine.

Type of specimen
Clinical: Urine

Specimen Collection and Handling
1. For clinical samples follow appropriate techniques for handling specimens as per established guidelines

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.

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
Yellow coloured solution

Clarity
Clear without precipitate

Test
To about 10 ml urine, add 1 gm barium chloride, mix and filter, spread out the filter paper. When it is partly dry, drop a little fouchet's reagent or yellow nitric acid on the precipitate

Results
Development of green colour due to formation of biliverdin indicates the presence of bile (bilirubin) in the urine.

Please refer disclaimer Overleaf.
Storage and Shelf Life
Store below 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 (2,3).

Reference
1) Textbook of Medical laboratory Technology; Praful B. Godkar

In vitro diagnostic medical device
CE Marking
Storage temperature
Do not use if package is damaged

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