Gentian Violet

S010

Intended use

Gentian Violet is used as staining solution for monochrome staining of microbes.

Composition**

Ingredients

Gentian Violet	0.50 gm
Distilled water	100.0 ml

**Formula adjusted, standardized to suit performance parameters

Directions

1. Prepare a smear on a clear, dry glass slide.
2. Allow it to air dry and fix with gentle heat.
3. Flood the slide with Gentian Violet (S010).
4. Allow the stain to be in contact with the smear for 1-2 minutes.
5. Wash in slow-running water, just enough to remove excess of dye.
6. Flood the smear with Iodine, drain and flood again with Iodine for 1 minute.
7. Wash with decolourizer (alcohol) for about 5-15 seconds. Wash the slide to stop the action of decolourizer.
8. Flood with safranin for 1 minute, wash very lightly.
9. Blot dry and examine under oil immersion objective.

Principle And Interpretation

Gentian Violet is used as a simple stain where it can render the organisms violet. Earlier it was used in the Gram staining for distinguishing between gram-positive and gram-negative organisms. In Grams staining method, subsequently crystal violet has replaced gentian violet because of the defined chemical nature of crystal violet. The name "gentian violet" was originally used for a mixture of methyl pararosaniline dyes (methyl violet), but is now often considered a synonym for crystal violet.

Type of specimen

Clinical samples - Blood, urine, CSF, pus, wounds, lesions, body tissues, sputum etc.; food & dairy samples; Water samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines.
For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines.
For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards. 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. Use results of Gram stains in conjunction with other clinical and laboratory findings. Use additional procedures (e.g., special stains, inclusion of selective media, etc.) to confirm findings suggested by gram-stained smears.
2. False Gram stain results may be related to inadequately collected specimens or delay in transit.
3. Careful adherence to procedure and interpretive criteria is required for accurate results. Accuracy is highly dependent on the training and skill of microbiologist.

The sensitivity of Gram stain is 10^5 cells/ml or 10^4 if the specimen has been prepared with the cytocentrifuge. This is particularly applicable to the smear of a drop of urine, where an average of the one bacterial cell per field from an examination of 20 fields correspond to a count of >= 10^5 cfu/ml.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

- **Appearance :** Dark purple coloured solution.
- **Clarity :** Clear without any particles.
- **Microscopic Examination :** Gram staining is carried out where Gentian Violet is used as one of the stain and staining characteristic of organisms are observed under microscope using oil immersion lens.
- **Results :** Gram-positive organisms: Violet
  Gram-negative organisms: Red
  Other elements: various shades of red to purple

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 .

Reference

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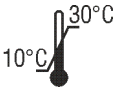

Storage temperature

Do not use if package is damaged

In vitro diagnostic medical device

CE Marking

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