



HiDecal (Strong decalcifying solution)

R085

Intended use

HiDecal (Strong Decalcifying solution) is recommended for decalcification of bone, hard tissue and keratinized tissue.

Composition**

Ingredients

Formic acid stock(88% aq.)	100.0 ml
Concentrated HCL	80.0 ml
Distilled water	820.0 ml

**Formula adjusted, standardized to suit performance parameters

Directions

1. Place all the tissues to be decalcified into a vessel containing excess of HiDecal (Strong Decalcifying solution) (R085), with section surface facing downwards.
2. Decalcify the tissues completely in this solution at room temperature.
3. Decalcification time may vary from 30 min. to 8 hours depending on the size of the sample and structural density of the tissue.
4. Rinse the material with tap water.
5. Complete decalcification can be determined by puncturing the tissue with a needle at a representative site (not of diagnostic importance).
6. Decalcified tissue can be processed for histological studies in the same way as other material of the corresponding size.
7. Staining of decalcified tissues can be carried out according to the standard procedures (as applicable).

Principle And Interpretation

In routine histological procedures, HiDecal solution (Strong Decalcifying solution) is used for decalcification of bone and other hard tissue. It is of special significance in oral pathology as decalcification of bone and teeth is a routinely required procedure. Strong mineral acids such as nitric and hydrochloric acids are used with dense cortical bone. As Strong acids damage cellular morphology, they are not recommended for delicate tissues such as bone marrow. Formic acid is the best all around decalcifier. In order to achieve optimal results when processing calcified tissues, it is important to determine the point at which decalcification is complete, since incomplete decalcification can lead to tissue distortions and over decalcification causes problems with staining, in particular nuclear staining.

Type of specimen

Clinical samples: bone, hard tissue and keratinized tissue.

Specimen Collection and Handling

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.

Limitations

1. The times taken for decalcification are likely to be different if used on different weights of bone and other teeth than premolars, as the decalcification time is dependent on the size and structural density of the hard tissue.

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** : Colourless solution.
- **Clarity** : Clear without any precipitation.
- **Test** : For decalcification of Bones and other hard Tissue

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

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition. Vol. 2.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015)
3. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academi Press, London. c.
4. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
5. Lynch SR. 4th ed. London: W. B. Saunders; 1983. Lynch's Medical Laboratory Technology; pp. 937-944.
6. Bhaskar SN. 10th ed. New Delhi: CBS Publishers and Distributors; Orban's Oral Histology and Embryology; pp. 349 - 354.



Storage temperature



Do not use if package is damaged



In vitro diagnostic medical device



CE Marking



HiMedia Laboratories Pvt Limited
C-40,21/Y, MIDC, Wagle Ind Area,
Thane(W)-400604,Maharashtra,India



CEpartner4U,ESDOORNLAAN 13,3951
DB MAARN,The Netherlands,
www.cepartner4u.eu

Revision : 01/2022

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.