



## 3C-242

Malinol, (Canada balsam, artificial)

In-vitro diagnostic agent

### Description

The product 3C-242 is a water-free, ready-to-use covering agent for professional users in microscopy. The product comes in 3 different pack sizes: 3C-242.00100 (100ml bottle), 3C- 242.00250 (250ml bottle) and 3C-242.01000 (1l bottle)

### Main components

Xylol (CAS no. 1330-20-7)	37.0%
Butylenmethacrylat (CAS no. 97-88-1)	2.4%
Polymer resins	60.6%

### Purpose

"Malinol, Canada balsam (artificial)" for microscopy is used to cover anhydrous specimens of human origin. Covering takes place after the samples have been fixed, embedded if necessary and stained histologically, bacteriologically, haematologically or cytologically and counterstained if necessary and thus made evaluable for diagnostics. Covering allows the samples to be examined under a light microscope and serves to preserve them for years.

### Sample material and sample preparation

Sampling may only be carried out by qualified personnel. All samples must be processed with state-of-the-art technology. All samples must be clearly labelled.

Sample material:

- Sections of human tissue (3–5  $\mu$ m thickness) after fixation, for instance, by buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin.
- Fixed and stained cytological smears, such as sputum, smears from fine needle aspiration biopsies, rinsing fluids, imprints and effusions.
- Smear specimens after air-drying, heat-fixing and staining of bacteriological material, such as liquid and solid enrichment cultures of bacteria from body fluids, exudates and pus
- Haematologically processed and stained blood and bone marrow smears of human origin

### Test principle

In the process of staining, the samples are dehydrated over an ascending ethanol series before being covered and are finally transferred to an anhydrous solvent, which is called an intermediate (e.g. toluene, xylene, xylene substitutes). The anhydrous covering agent Malinol Canada balsam contains the solvent xylene (intermediate) as a base and is dropped in dissolved form onto the stained and dehydrated specimen of human origin and sealed airtight with a cover glass. The covering agent hardens due to the evaporation of the intermediate and forms a solid, clear film under the cover glass. The specimen is thus preserved and conserved. The refractive properties of the covering agent allow the specimen to be viewed under the microscope without interference.



## Implementation

After staining, cover the horizontal slides with Malinol Canada balsam by dripping approx. 0.2 ml of the covering agent onto the slides with the aid of a glass rod or dropper bottle. Once the covering agent is homogeneously distributed, a clean cover slip is applied. The space between the slide and the cover slip should be filled with the covering medium without trapped air bubbles. The specimen then remains horizontal until it has dried after approx. 20-30 minutes and can be examined under a microscope. The specimens are colour stable after correct pre-treatment.

## Result

Completely and airtightly sealed specimens are created, with their structure and colour preserved, enabling renewed microscopy at a later date.

## Precautionary measures

When removing the product, care must be taken to avoid contamination of the storage vessel. Once the solution has been removed, it must not be returned to the canister. If turbidity or solids appear, discard the product. The product is intended for single use and must not be reused.

## Storage and shelf life

Store the unopened containers in a dry place at 15 to 25 °C, avoiding direct sunlight. The shelf life is 2 years. See also the best-before date (BBD) on the label. Once the containers have been opened, the shelf life corresponds to the best-before date, as long as the storage conditions are observed and the solution is handled properly.

## Safety notice

If any serious incidents occur in connection with the product, please report them to the manufacturer and the national authority.

## Literature

Romeis, Mikroskopische Technik, Editors: Maria Mulisch, Ulrich Welsch, 2010, Springer Spektrum, 18th edition