



## 1A-160

Indigo carmine Ia

## 1A-164

Indigotine

In-vitro diagnostic agent

### Description

The product 1A-160 is a dry dye for the preparation of a staining solution (e.g. in picric acid) for use by professionals in histology. The product 1A-160 is supplied in 5 different pack sizes: 1A-160.00010 (10g bottle), 1A-160.00025 (25g bottle), 1A-160.00100 (100g bottle), 1A-160.00500 (500g bottle) and 1A-160.01000 (1kg bucket). The product 1A-164 is supplied in 4 different pack sizes: 1A-164.00010 (10g bottle), 1A-164.00025 (25g bottle), 1A-164.00100 (100g bottle) and 1A-164.01000 (10000g bucket).

### Main components

Indigo carmine (CI 73015)

### Purpose

"Indigo carmine Ia" staining (and also "indigotin" staining) is used for cell diagnostics for the examination of histological specimens (e.g. histological sections) and deployed for the staining of collagenous connective tissue. At the same time, the dye serves as a pH indicator and is used in vital staining in the gastrointestinal tract to show mucosal changes. The dye is present, among other things, in solution with picric acid (water or ethanol) and is used for differentiated connective tissue imaging. The dye solution is intended for professional users.

### 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 after fixation, for instance by means of buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin or frozen sections.

### Test principle

For dyeing, the dry dye indigo carmine Ia or indigotin is first mixed with water, ethanol or picric acid. During staining, collagenous connective tissues turn blue. The pH indicator in the dye turns yellow above a pH value of 13 and blue below a pH value of 11.4. Indigo carmine Ia or indigotine is a redox indicator and turns yellow when it reacts.



## Staining

Before staining, deparaffinise the sections and transfer them to distilled water via a descending ethanol series. The dry dye must first be dissolved with picric acid, water or ethanol with water. After being stained with indigocarmine Ia solution, the samples are washed in distilled water and transferred to xylene via an ascending ethanol series. The samples can be covered with a synthetic covering medium for subsequent microscopy.

To ensure the differentiability of the target structures, suitable control preparations should be carried along with the staining.

The usual staining protocols known from literature must be used. Staining may only be carried out by qualified personnel.

## Result

Collagen connective tissue                      blue

## 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 5 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

<https://carmonja.com/produkt/indigo-carmin-1prozent/>

