



2C-340

Eosin-nigrosin solution

In-vitro diagnostic agent

Description

The product 2C-340 is a ready-to-use solution for professional users in histology. The product comes in 2 different pack sizes: 2C-340.00100 (100ml bottle), 2C-340 and 2C-340.01000 (1l bottle).

Main components

Nigrosine (C.I.50420)	100.0g/l
Eosin (C.I.45380)	6.9g/l
Sodium chloride (CAS 7647-14-5)	9g/l

Purpose

The "eosin-nigrosin solution" is used to assess the vitality and at the same time to study the pathomorphology of spermatozoa. It is a ready-to-use dye solution for professional users.

Sample material and sample preparation

Samples are taken according to the usual procedures. It must be ensured that fresh samples are properly fixed immediately after sampling. All samples must be processed with state-of-the-art technology. All samples must be clearly labelled.

Sample material: Sperm samples

Test principle

Viable sperm (with intact membranes) remain unstained. Non-viable sperm (with damaged membranes), on the other hand, are stained with eosin. The highly concentrated nigrosine colours the background for easier recognition of the only faintly stained sperm.

Staining

Mix the semen sample well. Take 50 µL of the semen and mix with the same volume of eosin-nigrosin solution and wait for 30 seconds. Make a smear of this mixture on a slide and let it air dry. Inspect immediately after drying or after embedding. Microscope the sample at 400x or 1000x magnification (use immersion oil for 1000x).

Result

Viable sperm	colourless, white or slightly pink heads
Non-viable sperm	red or very pink heads
Background	dark



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

WHO, WHO laboratory manual for the examination and processing of human semen, 2012, Springer, 5th edition