

# NEXTERION® Coverslips



Storage of NEXTERION® coverslips

## High quality glass

The thin glass substrates are manufactured from SCHOTT's D 263™ M cover glass. This is a colorless low alkali borosilicate glass with a very low iron content. D 263 M meets the requirements laid down in ISO 8255.

The outstanding features of D 263™ M include:

- High spectral transmission and optically clear
- Excellent internal glass quality with absence of inclusions, striae, bubbles, streaks, etc.
- Excellent flatness and very good surface quality
- Low background fluorescence
- Refractive index of  $1.5255 \pm 0.0015$  optimized for microscope objectives
- Abbe number of  $56 \pm 2$
- Excellent resistance to chemical attack (hydrolytic class ISO 719-HGB 1)
- Non-neurotoxic and non-cytotoxic

## Tight Thickness Tolerances

For high resolution imaging applications, coverslips often have to be hand-selected for the required  $170 \mu\text{m}$  thickness to optimize image quality. To avoid this tedious process and to ensure consistent and reproducible image quality, SCHOTT offers high performance NEXTERION® coverslips with a thickness of  $170 \mu\text{m} \pm 5 \mu\text{m}$ . These are ISO 8255-compliant Type #1.5H with restricted thickness-related tolerance.

## Introduction

To address the requirements for thin glass substrates for microarraying and the needs of high resolution imaging applications, SCHOTT extended its standard product range by adding coverslips and coverglasses. The coverslips are available in different standard dimensions, with or without ultrasonic cleaning and functional coating.

## Dimensions and Formats

SCHOTT NEXTERION® coverslips are available in both "High performance" and "Standard" glass thickness tolerances:

"High performance" coverslips #1.5H

Thickness:  $170 \mu\text{m} \pm 5 \mu\text{m}$

18 x 18 mm coverslips

24 x 60 mm coverslips

25 x 65 mm coverslips

25 x 75 mm coverslips

Other dimensions are available to special order

"Standard" coverslips #1.5

Thickness:  $175 \mu\text{m} \pm 15 \mu\text{m}$

22 x 22 mm coverslips

24 x 24 mm coverslips

24 x 60 mm coverslips

Other dimensions and standard coverslip glass thicknesses (#0, #1, #2 etc.) are available on request.

## Cleaning

The NEXTERION® coverslips are offered uncleaned as well as cleanroom cleaned. The cleaning is performed under Class 100 cleanroom conditions using a highly efficient multi-step, ultrasonic cleaning method, which removes glass debris and surface contaminants. This avoids the time-consuming and cost-intensive procedures normally associated with coverslip preparation. NEXTERION® coverslips give you more time to get on with your research work.

## Packaging

Standard coverslips are packed surface-to-surface; this often causes scratching of the glass. NEXTERION® cleanroom cleaned coverslips are visually checked and individually packed into custom-made packaging.

Specially-developed packaging manufactured from low out-gassing plastic has adjustable holders to separate and protect cleaned and/or coated coverslips. The convenient package also acts as a storage container, preventing particle contamination and damage to the surfaces. The boxes are sealed under an inert atmosphere after cleaning (and coating) to preserve the activated surface.

## Uncoated Coverslips

The coverslips can be supplied as uncoated uncleaned glass or as ready to use cleanroom cleaned glass.

## Coated Coverslips

Any of the standard NEXTERION® functional coatings can be applied to coverslip glass in just about any size.

The coatings include:

- Aminosilane
- Aldehydesilane
- Epoxysilane
- 3-D thin film

SCHOTT Microarray Solutions is also able to coat glass coverslips with coating chemistries developed by clients. If you cannot find the format or coating you are looking for, please contact us.

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