The NEXTERION® AL coating represents a uniform surface featuring aldehyde groups, that are readily reactive to primary amines in order to bind all types of amino-containing or amino-modified bio-molecules. The covalent bond formed at the terminus of the nucleic acid offers both: stability and maximal base pairing opportunity. The covalent binding diminishes sample loss during the course of experiments and permits stringent washing steps, which reduce background noise and allow greater sensitivity. Additional immobilization steps, such as baking or UV cross-linking, are not required for immobilization. Produced in ISO class 5 clean room conditions using a standardized process and running a stringent quality control system, aldehydesilane coated substrates are available in standard and custom formats.

**Product Information**

**Coating Chemistry**

The reaction between an aldehyde group and a primary amine to form a covalent bond.

**Shelf Life**
Nine months for sealed packages at room temperature.

**Immobilization Method**
Covalent binding via amine reactive chemistry.

**Probe Types**
- Amino-modified PCR products and BACs/YACs
- Amino-modified oligonucleotides
- Small protein fragments such as peptides
Advantages

Material
- High-quality borosilicate glass
- Alternative substrate materials can be offered

Formats
- Standard sizes (slide format, SBS plate format)
- Customized dimensions and thicknesses

Structuring
- Pre-scoring
- Hydrophobic coating for multiplexing

Markings
- Barcodes (1D e.g. code 39, code 128; 2D e.g. QR, data matrix)
- Logos
- Position markings and fiducials

Quality
- Proprietary thin-film deposition process optimized by SCHOTT
- Excellent intra- and inter-lot reproducibility
- Physical and functional quality control
- ISO class 5 clean room production
- Relevant processes in place for diagnostic company needs

Supply Forms

<table>
<thead>
<tr>
<th>Product</th>
<th>Size (mm)</th>
<th>Thickness (mm)</th>
<th>Pieces per pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide AL</td>
<td>75.6 x 25.0</td>
<td>1.0</td>
<td>25</td>
</tr>
<tr>
<td>Plate AL</td>
<td>110.0 x 74.0</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Customized AL</td>
<td>Variable</td>
<td>0.1–2.5</td>
<td>Variable</td>
</tr>
</tbody>
</table>