



## **NEXTERION® Spot (order code: 1066029)**

### **DNA spotting buffer**

NEXTERION® Spot is a robust spotting buffer that is suitable for use with most NEXTERION® coated slides. The reagent is a modified phosphate buffer with a pH of 9.0 and is supplied as a 2x concentrated solution. This buffer ensures excellent spot morphology, high signal intensities, and results in medium to small spot diameters. In addition, NEXTERION® Spot offers users the option of “tuning” the size of the printed spot by adding varying volumes of detergents. Specific instructions on how to modify the printing buffer are available on request, or on the SCHOTT Microarray Solutions website. NEXTERION® Spot is available as a 2x concentration in 100 mL packs.

## **NEXTERION® Block E (order code: 1066071)**

### **Highly effective reagent for deactivating epoxy coating after printing**

NEXTERION® Block E is a blocking solution optimized for NEXTERION® Slide E. It reacts rapidly with residual epoxy groups in both the printed and unprinted areas of the slide surface and was developed to ensure high signal intensities with reduced non-specific background, thus increasing overall data reproducibility. SCHOTT Microarray Solutions has demonstrated that NEXTERION® Block E is an extremely important component for producing high quality DNA microarrays with very good signal-to-background ratios. NEXTERION® Block E is available as a 4x concentration in 1000 mL packs.

## **Introduction**

The quality of the results from a microarray experiment depends on many factors: the substrate utilized for printing, the printing buffer, the labeling method employed, and the blocking and hybridization conditions utilized. For this reason, SCHOTT Microarray Solutions provides a range of ready-to-use reagents optimized to get the best performance from the NEXTERION® coated slides.

## **Spot morphology and signal intensity strongly depend on the following parameters**

- Composition of spotting solution
- Compatibility of spotting buffer and slide surface chemistry
- Spot density/pitch
- Nature, concentration, and purity of probe molecule
- Spotting technology
- Environmental conditions
- Immobilization procedures



Examples of packaging of NEXTERION® reagents

## **NEXTERION® Hyb (order code: 1066075)**

### **Formamide free hybridization buffer**

NEXTERION® Hyb is a hybridization buffer that has been developed for optimal spot morphology, high signal intensities with reduced non-specific background, and high data reproducibility on NEXTERION® slides. NEXTERION® Hyb is compatible with many different surface chemistries and hybridization methods and may be used with cDNA or oligonucleotide arrays. The reagent is supplied as a ready-to-use 1x concentrated solution. By avoiding the laborious preparation of multi-component hybridization buffers, NEXTERION® Hyb can save users time and effort. The components in the buffer help to stabilize the hybridization process during extended runs, and also reduce background fluorescence. NEXTERION® Hyb has a low viscosity, does not contain formamide and is recommended for applications that cannot tolerate formamide, or that require temperatures greater than 60°C. NEXTERION® Hyb is available as a 1x concentration in 100 mL packs.

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