

This certificate is an example. A complete certificate containing lot-specific information, such as concentration and volume, will be shipped with your purchase.

## PD-Ru1 Proteinic-blocked (Phosphorescent Nanoparticles)

**Catalog No:** 15911, 16911

**Lot No:** Not Available

### Chemical Properties:

Contents: 5 ml (Cat # 15911) or 10 ml (Cat 16911) aqueous suspension of PD-Ru1 Proteinic-blocked, 0.5 % (w/w) in 10 mM MOPS + 0.5 % (w/w) BSA, pH 7, 15 mM sodium azide

### Fluorescent Properties:

PD-Particles are based on a novel polymer, which form lattices similar to polystyrene, but with a highly reduced oxygen permeability. Therefore the decay time and the intensity of the incorporated dye-molecules are nearly independent of the oxygen concentration in the sample. In addition the polymer protects the dye from other environmental effects. The particles are smaller than 100 nm, their surface is carboxy-modified, and is blocked with BSA.

PD-Nanoparticles are “loaded” with the Ru-1 dye, showing a large Stoke's shift of 145 nm. The excellent shielding of the dye against quenchers like oxygen leads to particles with well defined luminescent decay times:

Excitation max: 470 nm

Emission max: 615 nm

Decay-time t: 6.1  $\mu$ s (air saturated) 6.2  $\mu$ s (oxygen free)

Delivery-Form: 0.5 % (w/w) in buffer

### Quality Control:

The particles have been quality tested by spectro-photometrical evaluation and by determining the solid residue after lyophilization.

### Storage:

To ensure stability, the aqueous suspension should be stored at 4°C in the dark.

Caution: Do not dry or freeze; do not use more than 5% organic solvent. This product is guaranteed for 12 months from the date of arrival.

