

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

## PAN-Ru1 carboxylated (Phosphorescent Nanoparticles)

**Catalog No:** 15810, 16810

**Lot No:** Not Available

### Chemical Properties:

Contents: 5 ml (Cat # 15810) or 10 ml (Cat # 16810) aqueous suspension of PAN-Ru1 carboxylated, 0.5 % (w/w) in 10 mM MOPS, pH 7, 15 mM sodium azide

### Fluorescent Properties:

PAN-Particles are based on a novel polymer, which form lattices with reduced oxygen permeability and result in a very good protection of the incorporated dye against other environmental effects. The combination of these new polymers with Ruthenium-complexes result in novel nanoparticles with high fluorescent intensities.

The particles are about 50 nm, their surface is carboxy-modified and has additional sulfo-groups.

PAN-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: 5.3  $\mu$ s (air saturated) 5.9  $\mu$ 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.

