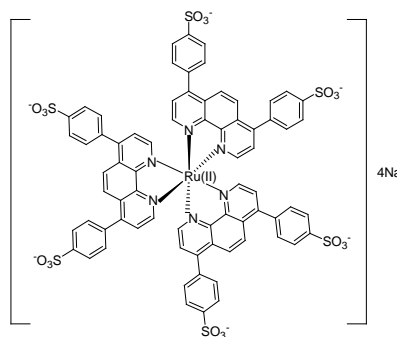


PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: **RuBPS** (Ruthenium(tris(bathophenanthrolinedisulfonate), tetrasodium salt)

CATALOG # **80021**

MOLECULAR INFORMATION: $C_{72}H_{42}N_6Na_4O_{18}RuS_6$
MWt: 1664.55
[301206-84-8]



PROPERTIES:

Color & Form Yellow solid
Solubility Soluble in water
Absorption/Emission 462 (broad)/603 nm (in H₂O)
Extinction Coefficient 32,000

STORAGE AND HANDLING: Store at 4°C and protect from light

APPLICATION: RuBPS is a negatively-charged water-soluble luminescent ruthenium complex. The complex can be efficiently excited by either UV light or visible light in the wavelength range from 400 nm to 500 nm with bright red emission centered around 605 nm. Ruthenium complexes such as RuBPS typically have luminescence lifetimes in the micro second range and a Stokes shift over 100 nm. By using time-resolved luminescence measurement, the combination of long luminescent lifetime and large Stokes shift offer the possibility for extremely sensitive detection that could approach the sensitivity of radioactive detection. Among many potential applications, RuBPS could be used as a polar tracer similar to the uses of Lucifer Yellow and FluoroGold.

TOXICITY: Not established. Not listed by NTP, IARC or OSHA.

FIRST AID: Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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