Phenol Red

pH indicator and pH monitor agent

In microbiology, phenol red is frequently used as a pH indicator because it changes color to visually represent pH changes. This characteristic is useful for determining the acidity or alkalinity of solutions, which helps scientists comprehend their chemical environment.

Furthermore, phenol red powder is essential for monitoring enzymatic reactions in biochemical testing. Via color changes in response to pH changes, it gives real time information on the status of the reaction.

Br may be measured in both fresh and saltwater using this dye. In diagnostic labs, phenol red is used to assess kidney function using a colorimetric technique.

Cat. Number	ASC-1005
CAS Number	143-74-8
MDL Number	MFCD00003552
PubChem	310278714
Molecular Weight	354.38 gr/mol
Molecular Formula	$C_{19}H_{14}O_5S$
Storage Temperature	20 °C
Form and Color	Powder / Red to dark red
Solution Appearance	1 % in 95 % ethanol / clear golden solution
Solubility	Soluble in water, ethanol, methanol and insoluble in chloroform.
pH Transition Range	6.8 (Brownish yellow) – 7 (Orange) – 8.2 (red violet)
Wavelength of Maximum Absorption	430 - 435 nm (pH 6.5)
Wavelength of Maximum Absorption	557 - 560 nm (pH 8.2)
Absorptivity (E1%, 1cm cell)	600 - 700 (pH 6.5)
Absorptivity (E1%, 1cm cell)	1100 - 1200 (pH 8.2)
Loss on Drying	≤ 5 %
Synonym	Phenolsulfonephthalein;3,3-Bis(p-hydroxyphenyl)-2,1-3H-benzoxathiole