

## Life Science Applications for the Fluorimeter

Application	Ex/Em(nm)	Excitation filter	Part code	Emission filter	Part code
<b>DNA/RNA quantitation</b>					
Hoechst 33258	356/458	Band pass UG1 320-380nm	2004627126	Interference 460nm	2004627167
Ethidium Bromide	546/595	Interference 546nm	2004627176	Interference 590nm	2004627182
OliGreen (ssDNA)	500/525	Interference 480nm	2004627168	Interference 520nm	2004627172
RiboGreen (RNA)	500/525	Interference 480nm	2004627168	Interference 520nm	2004627172
<b>Protein quantitation</b>					
NanoOrange protein assay	470/570	Interference 480nm	2004627168	Interference 590nm	2004627182
<b>Bacterial viability</b>					
SYTOX® Green	504/523	Band pass BG28 380-500nm	2004627124	Interference 520nm	2004627172
<b>Enzyme assays</b>					
Alkaline phosphatase (4-MUP fluorescence)	360/449	Interference 360nm	2004627157	Interference 450nm	2004627139
NAD/NADH	340/460	Interference 340nm	2004627133	Interference 460nm	2004627167

The above figures are typical and for guidance only, variations may occur due to the use of different methodologies and/or reagents, all experimental details should be verified before analysis is undertaken.

## Environmental Applications for the Fluorimeter

Application	Ex/Em(nm)	Excitation filter	Part code	Emission filter	Part code
Chlorophyll a (acidification method)	436/680	Band pass BG28 380-500nm	2004627124	Cut-off Kodak 29, 610nm	2004627127
Chlorophyll a (non-acidification method)	436/680	Interference 436nm	2004627165	Interference 680nm	2004627193
Aluminium in water (Lumogallion complex)	480/550	Band pass BG28 380-500nm	2004627124	Cut-off Ilford 201, 545nm	2004627128
Detection of Cyanobacteria:					
Phycocerythrin (marine)	544/577	Interference 546nm	2004627176	Interference 577nm	2004627180
Phycocyanin (fresh water)	630/660	Interference 630nm	2004627186	Interference 660nm	2004627191
Flow measurement using Rhodamine WT	546/>570	Interference 546nm	2004627176	Interference 570nm	2004627179
Coloured dissolved organic matter (for high DOM concentrations a low gain should be used)	310-390/410-600	Band pass UG1 320-380nm	2004627126	Cut-off Kodak 2B, 395nm	2004627130
Ammonium assay	310-390/410-600	Band pass UG1 320-380nm	2004627126	Cut-off Kodak 2B, 395nm	2004627130

The above figures are typical and for guidance only, variations may occur due to the use of different methodologies and/or reagents, all experimental details should be verified before analysis is undertaken.

## Food Applications for the Fluorimeter

Application	Ex/Em(nm)	Excitation filter	Part code	Emission filter	Part code
Histamine in Fish	360/450	Interference 360nm	2004627157	Interference 450nm	2004627139
Quinine in Tonic water	350/445	Interference 350nm	2004627140	Interference 450nm	2004627139
<b>Aflatoxins</b>					
B <sub>1</sub> in chloroform	365/413	Interference 365nm	2004627138	Interference 415nm	2004627162
B <sub>1</sub> in methanol	363/426	Interference 365nm	2004627138	Interference 430nm	2004627164
B <sub>1</sub> in water, pH 2	370/435	Interference 370nm	2004627158	Interference 436nm	2004627165
B <sub>2</sub> in chloroform	365/413	Interference 365nm	2004627138	Interference 415nm	2004627162
B <sub>2</sub> in methanol	365/425	Interference 365nm	2004627138	Interference 430nm	2004627164
B <sub>3</sub> in chloroform	365/432	Interference 365nm	2004627138	Interference 430nm	2004627164
G <sub>1</sub> in chloroform	365/430	Interference 365nm	2004627138	Interference 430nm	2004627164
G <sub>1</sub> in methanol	365/450	Interference 365nm	2004627138	Interference 450nm	2004627139
G <sub>2</sub> in chloroform	365/430	Interference 365nm	2004627138	Interference 430nm	2004627164
G <sub>2</sub> in methanol	365/450	Interference 365nm	2004627138	Interference 450nm	2004627139
<b>Vitamins</b>					
A in absolute ethanol	327/510	Interference 326nm	2004627153	Interference 510nm	2004627171
A in acetate	360/508	Interference 360nm	2004627157	Interference 510nm	2004627171
B <sub>1</sub> Thiamine after oxidation to thiochrome	365/430-435	Interference 365nm	2004627138	Interference 430nm	2004627164
B <sub>2</sub> Riboflavin	370/455-520	Interference 370nm	2004627158	Cut-off Kodak 2B, 395nm	2004627130
B6 compounds: Pyridoxine	340/400	Interference 340nm	2004627133	Interference 400nm	2004627135
Pyridoxamine	335/400	Interference 334nm	2004627155	Interference 400nm	2004627135
Pyridoxal	330/385	Interference 330nm	2004627154	Interference 390nm	2004627159
B <sub>12</sub>	275/340	Interference 280nm	2004627145	Interference 340nm	2004627133
E α-tocopherol	295/340	Interference 295nm	2004627147	Interference 340nm	2004627133
p-Aminobenzoic acid	294/345	Interference 295nm	2004627147	Interference 350nm	2004627140
Folic acid	365/450	Interference 365nm	2004627138	Interference 450nm	2004627139

The above figures are typical and for guidance only, variations may occur due to the use of different methodologies and/or reagents, all experimental details should be verified before analysis is undertaken.