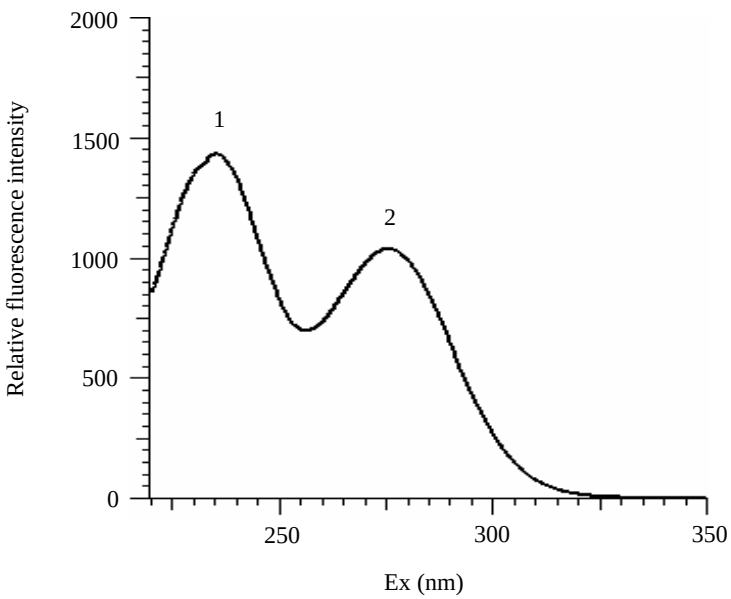
Excitation Spectrum of Optical Glass (BK-7)

INTRODUCTION

BK-7, an optical glass, is classified as borosilicate glass. It has a good transmittance at 350 nm- 2000 nm and can be used as a homogeneous optical material with little bubbles and impurities. The fluorescence was not confirmed at the excitation wavelengths higher than 350 nm. At the wavelengths lower than 350 nm, the light was absorbed and intense fluorescence was confirmed. For samples such as glass that transmits the excitation light, the fluorescence can be measured with high accuracy by using a solid sample holder with a transmission hole (P/N: 250-0366).

SAMPLE	ACCESSORY
SAMPLE NAME : Optical glass (BK-7)	Solid sample holder with a transmission hole (P/N : 250-0366) 

INSTRUMENT CONDITIONS				PEAKS (nm)
INSTRUMENT	: F-7000			1 : 235
EM WAVE LENGTH	: 365 nm	RESPONSE	: Auto	2 : 275
EX BANDPASS	: 5 nm	EM FILTER	: 310	
EM BANDPASS	: 5 nm	PHOTOMULTIPLIER	: R3788	
SCAN SPEED	: 240 nm/min	PHOTOMULTIPLIER VOL.	: 400 V	



[Corrected spectrum]

KEY WORDS

Optical Glass, BK-7, Glass, Base Material, Solid, Excitation Spectrum, FL, FL-7000

Fluorophotometer (FL)

Sheet No. FL080011-01

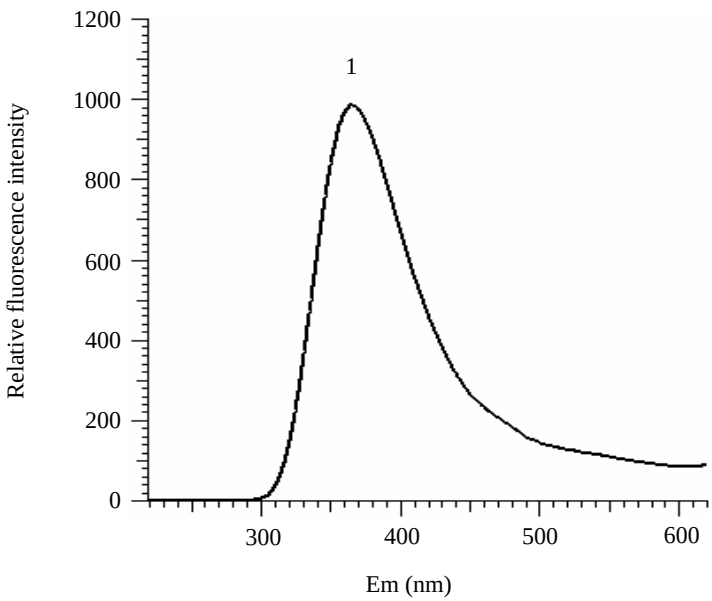
Fluorescence Spectrum of Optical Glass (BK-7)

INTRODUCTION

BK-7, an optical glass, is classified as borosilicate glass. It has a good transmittance at 350 nm- 2000 nm and can be used as a homogeneous optical material with little bubbles and impurities. The fluorescence spectrum at the excitation wavelength of 275 nm was obtained and the fluorescence having a peak around 365 nm was confirmed. For samples such as glass that transmits the excitation light, the fluorescence can be measured with high accuracy by using a solid sample holder with a transmission hole (P/N: 250-0366).

SAMPLE	ACCESSORY
SAMPLE NAME : Optical Glass (BK-7)	Solid sample holder with a transmission hole (P/N : 250-0366) 

INSTRUMENT CONDITIONS				PEAKS (nm)
INSTRUMENT	: F-7000			1 : 365
EX WAVE LENGTH	: 270 nm	RESPONSE	: Auto	
EX BANDPASS	: 5 nm	EM FILTER	: 310	
EM BANDPASS	: 5 nm	PHOTOMULTIPLIER	: R3788	
SCAN SPEED	: 240 nm/min	PHOTOMULTIPLIER VOL	: 400 V	



[Corrected spectrum]

KEY WORDS

Optical Glass, BK-7, Glass, Base Material, Solid, Excitation Spectrum, FL, FL-7000

Fluorophotometer (FL)

Sheet No. FL080011-02

3D Fluorescence Spectrum of Optical Glass (BK-7)

INTRODUCTION

BK-7, an optical glass, is classified as borosilicate glass. It has a good transmittance at 350 nm- 2000 nm and can be used as a homogeneous optical material with little bubbles and impurities. By obtaining the three-dimensional fluorescence spectrum, the characteristic excitation and fluorescence wavelengths of the sample can be obtained at once. For samples such as glass that transmits the excitation light, the fluorescence can be measured with high accuracy by using a solid sample holder with a transmission hole (P/N: 250-0366).

SAMPLE

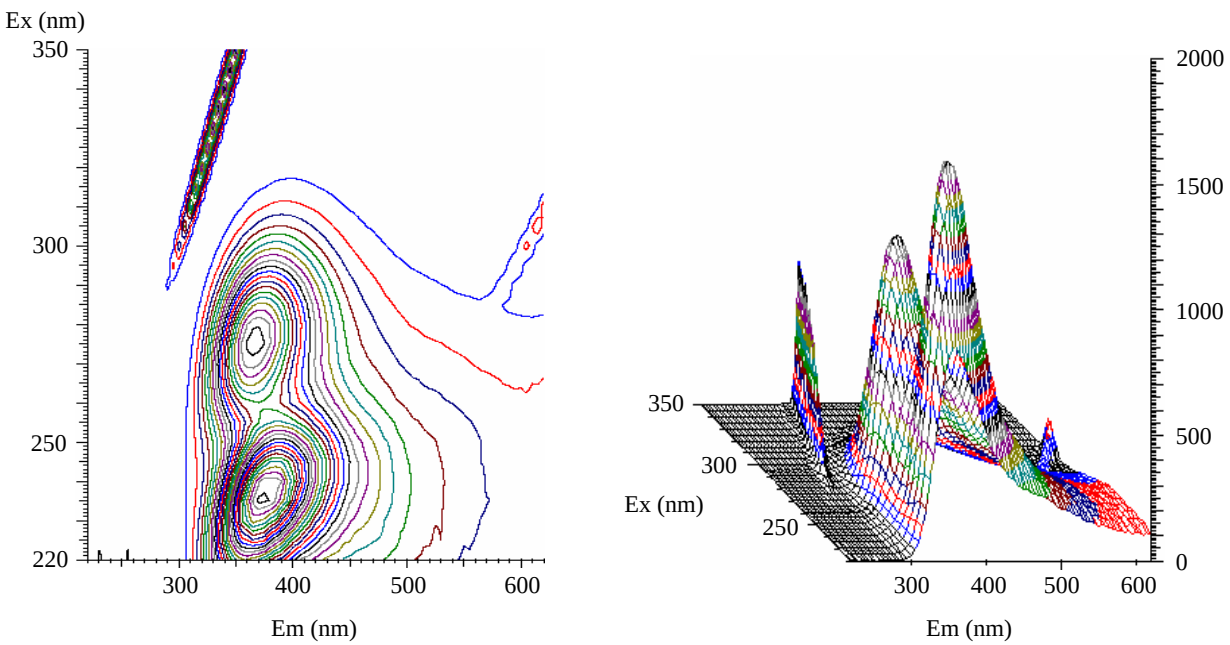
SAMPLE NAME : Optical Glass (BK-7)

ACCESSORY

Solid sample holder with a transmission hole
(P/N : 250-0366)

INSTRUMENT CONDITIONS

INSTRUMENT	: F-7000				
EX BANDPASS	: 5 nm	RESPONSE	: Auto	FULLSCALE	: 2000
EM BANDPASS	: 5 nm	EM FILTER	: 430	DIVISION NUMBER	: 50
SCAN SPEED	: 60000 nm/min	PHOTOMULTIPLIER	: R3788		
		PHOTOMULTIPLIER VOL.	: 400 V		



KEY WORDS

Optical Glass, BK-7, Glass, Base Material, Solid, Three-dimension, Three-dimensional Fluorescence Spectrum, FL, FL-7000

Fluorophotometer (FL)

Sheet No. FL080011-03