

Application Note

by Distek, Inc.

In-situ UV Fiber Optic measurement of
Acetaminophen (500mg) in DI Water
using the Opt-Diss 405.

November 2015

Sponsored by



Method Conditions

Path Length: 1 mm
Wavelength: 244 nm
Unit Dosage: 500 mg
Media: DI Water
Volume: 900 mL
Run Time: 10 Minutes
Time Points: 61

Baseline Correction Method:
Average Over Range (325 - 375 nm)

Standard Results

	<u>NAME</u>	<u>CONCENTRATION</u> (mg / mL)
STD A	Acetaminophen	0.5525
STD B	Acetaminophen	0.5525
ABS A:	0.7338	
ABS B:	0.7343	
RF Used:	1.3282	
RF Ratio:	0.9993	

% Dissolved

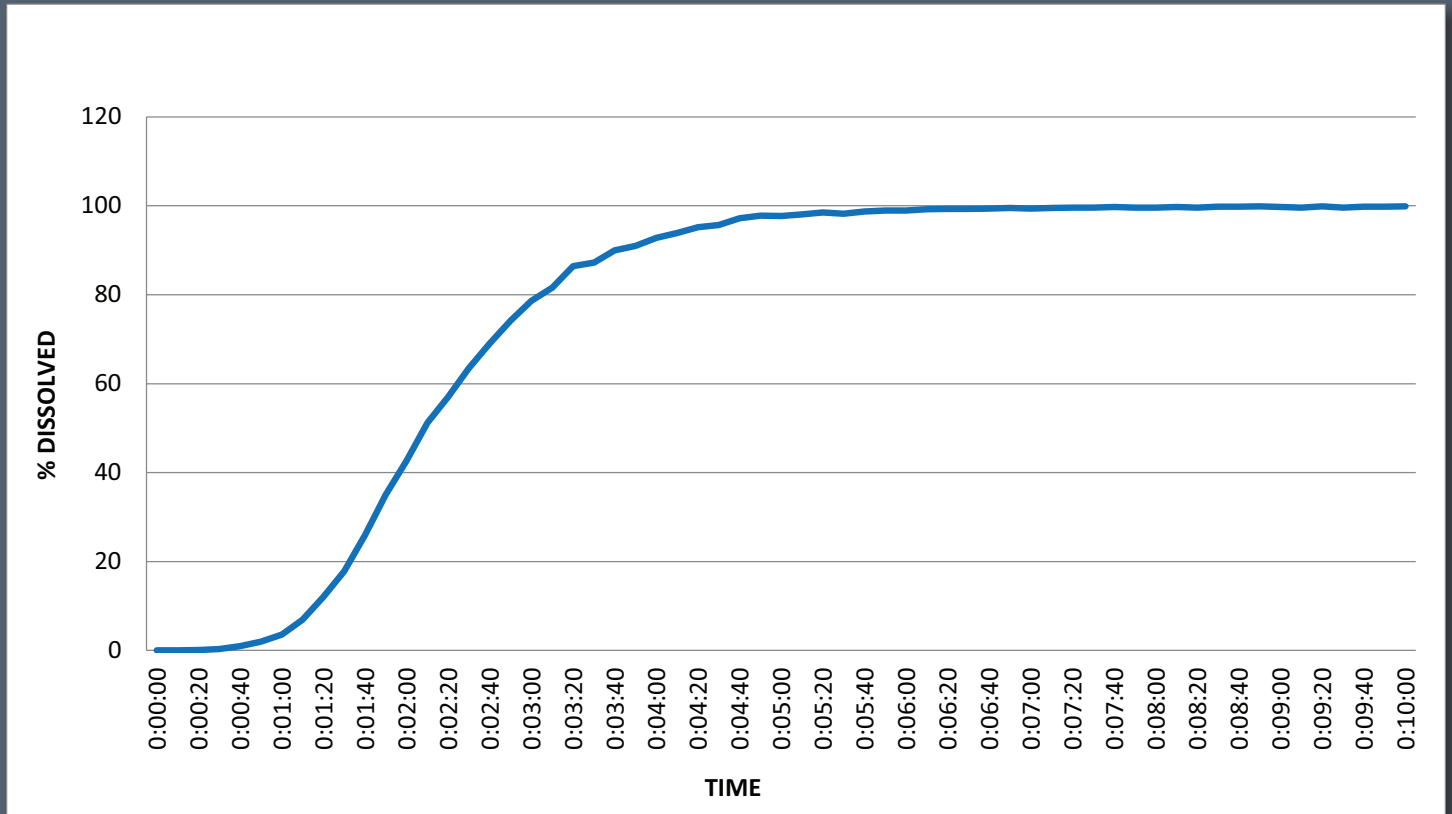


Figure 1: Dissolution results obtained by the Opt-Diss 405 for 500 mg Acetaminophen

Sample Absorbance Spectra

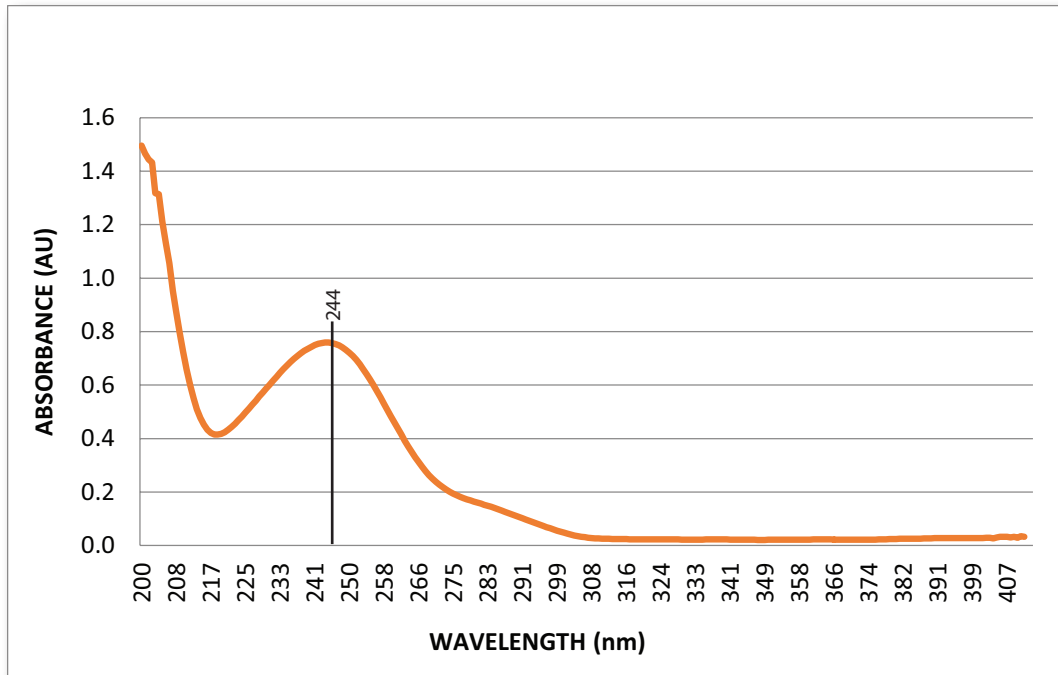


Figure 2: Sample Absorbance Spectra obtained by the Opt-Diss 405 for 500 mg Acetaminophen

Standard Absorbance Spectra

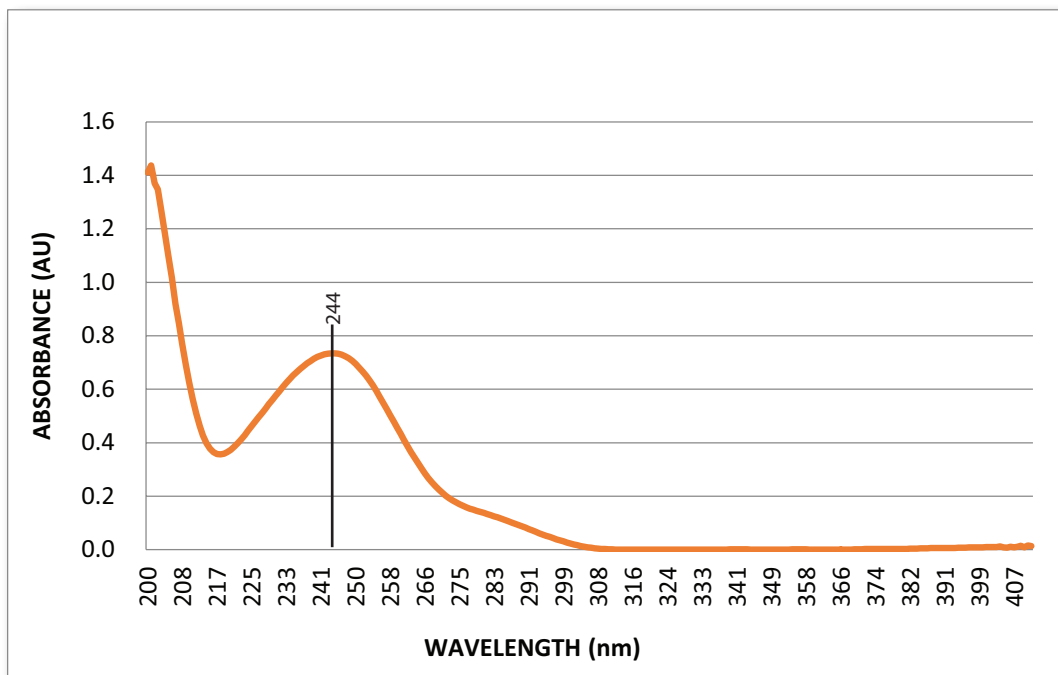


Figure 3: Standard Absorbance Spectra obtained by the Opt-Diss 405 for 500 mg Acetaminophen

ABOUT US

Distek, Inc. is a leading manufacturer of pharmaceutical laboratory instruments, specializing in dissolution testing products, as well as an experienced provider of validation and qualification services.

In addition, Distek provides solutions for dissolution media degassing, dispensing and disposal, in-situ fiber optic UV, bathless tablet disintegration testing, physical tablet testing, content uniformity / sample preparation, dissolution video monitoring and automated sampling.

Founded in 1976, Distek has grown to offer innovation and support to companies worldwide. Our success is dependent upon Distek's employees, who bring their expertise, experience, and dedication to providing pharmaceutical laboratory instruments and services of the finest quality. The company's commitment to excellence extends to the community, as Distek actively supports educational and research activities with donations of equipment and assistance.

For technological advancements that offer reliable and consistent performance, the pharmaceutical industry trusts Distek.

Distek, Inc.

121 North Center Drive
North Brunswick, NJ 08902
888.2.DISTEK
info@distekinc.com
www.distekinc.com