

## Universal Standard (USP/EP/JP) Reagents suitable in high-performance Liquid Chromatography

To meet each specifications of JP (Reagents), UPS (Reagents) and EP (Reagents)

Wako's acetonitrile, methanol and hexane for the Japanese Pharmacopoeia (JP) General Tests (for Liquid Chromatography) can meet not only corresponding specifications of reagents of the JP but also those of the USP, which corresponds to the specifications of the current edition of ACS Reagent Chemicals as well as those of the European Pharmacopoeia (EP). Such high-grade reagents achieve to analyze drugs test at every laboratory of the world.

### Features:

1. Meet the following specifications listing on "Reagents" of one or all of the latest JP, USP and EP:  
*Water; Residue after evaporation; Refractive Index; UV absorbance; Fluorescent test; Peroxides, etc..*
2. Samples are highly stable in the solution with these highly-purified solvents.
3. Achieve to reduce the probability that the filter or line are clogged
4. Highly chromatographic-sensitive and reproducible



► for the Japanese Pharmacopoeia General Tests (for Liquid Chromatography)

Description	Wako Catalog No.	Pkg. Size
<b>Acetonitrile</b> 99.9+ % (EP method); 99.8+ % (cGC); 99.5; % (USP-NF method)	019-21691	1 L
	015-21693	3 L
<b>Methanol</b> , 99.8+ % (USP-NF method; EP method); 99.7+ % (cGC)	136-15661	1 L
	132-15663	3 L
<b>Hexane</b> , 98.5+ % (USP-NF method); 96.0+ % (cGC)	085-08711	1 L
	081-08713	3 L

Prices are shown on the online catalog.  
Please visit the following: <http://www.e-reagent.com>

Acetonitrile Tested Item	Wako Product	Specifications of Acetonitrile as a reagent on each Pharmacopoeia			
		USP grade (ACS reagent grade)	EP grade	JP grade	
<b>General Use</b>					
1	Assay	99.9+ %	99.5+ %	99.9+ %	99.8+ %
2	Appearance	Colorless, clear liquid	Clear, colorless liquid	Clear, colorless liquid	Clear, colorless liquid
3	Color (APHA)	max. 10	max. 10	-	-
	Reflective Index	1.343 ~ 1.346	-	1.344	-
4	Residue after evaporation	max. 0.001%	max. 0.005 %	-	-
5	Titration acid	max. 8 µeq/g	max. 8 µeq/g	-	-
6	Titration base	max. 0.6 µeq/g	max. 0.6 µeq/g	-	-
7	Water (H <sub>2</sub> O)	max. 0.05 %	max. 0.3 %	-	-
8	pH	A 100 g/L solution is neutral to litmus paper	-	A 100 g/L solution is neutral to litmus paper	-
9	Distillation Range (80-82 degrees C)	min. 95 %	-	min. 95 %	-
<b>Specific Use</b>					
<b>UV Spectrophotometry</b>					
10	Wavelength (maximum allowable Absorbance (AU))	190nm 1.00 200nm 0.05 210 nm 0.03 220nm 0.02 230nm 0.014 240nm 0.009	190 nm 1.00  220 nm 0.05  254 nm 0.01	200nm 0.10	200nm 0.07 210 nm 0.046 220nm 0.027 230nm 0.014 240nm 0.009
<b>Liquid Chromatography Suitability</b>					
11	Gradient elution	To pass test	Passed test	-	-
12	Transmittance (240 nm)	min. 98 %	-	min. 98 %	-
<b>Specifications added by Wako</b>					
13	Ammonium	max. 0.3 ppm	-	-	-
14	Peroxides	max. 5 ppm	-	-	-
15	Substances Reducing Permanganate	To pass test	-	-	-
16	Fluorescence Test	To pass test	-	-	-

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