



## CERTIFICATE OF ANALYSIS

**GemPure™ Plus Water for Injection (WFI) Quality Water**

**(USP/EP/JP Grade)**

**(Catalog Number 901-002-021)**

Lot Number: M123063

Date of Manufacture: Jun2023

Product Expiry: Jun2025

Storage Temperature: 2°C – 30°C

For further Manufacturing or Research use only. Not for direct Therapeutic use.

**Product Description:** *GemPure™ Plus Water for Injection (WFI) Quality Water (USP/EP/JP Grade) meets the USP/EP/JP monograph for Water for Injection packaged in bulk for commercial use.*

Test	Methodology	Specification	Analysis
Appearance	Visual Inspection	Clear and colorless liquid	Clear and colorless liquid
<b>Biological Testing</b>			
Endotoxin	USP <85>, EP 2.6.14	< 0.25 EU/mL	< 0.012 EU/mL
<b>Microbiological Testing</b>			
Sterility	USP <71>, EP 2.6.1		
Bacteria		No growth	No Growth
Fungi		No growth	No Growth
<b>Biochemistry</b>			
Acidity or Alkalinity	EP	No change in appearance	No change in appearance
Ammonium	EP	≤0.2 ppm	<0.2 ppm
Calcium and Magnesium	EP	Blue color produced	Blue color produced
Chlorides	EP	No change in appearance	No change in appearance
Extractable Volume	JP<6.05>	Volume is not less than the nominal volume	Volume is not less than the nominal volume
Foreign Insoluble Matter	JP<6.06>	See Particulate Matter	Pass
Heavy Metals	EP 2.4.27	≤0.1 ppm	<0.1 ppm
Nitrates	EP	≤0.2 ppm	<0.2 ppm
Oxidizable Substances	USP/EP	Pink color does not completely disappear	Pink color does not completely disappear
<b>Particulate Matter</b>	USP <788>, EP 2.9.19		
≥ 25µm in size		≤ 3 particles/mL	0 particles/mL
≥ 10µm in size		≤ 25 particles/mL	1 particle/mL
Purity	JP	Pass	Pass
Residue on Evaporation	EP	≤3 mg (0.003%)	0.8 mg (0.0008%)
Sulfates	EP	No change in appearance	No change in appearance
<b>Total Organic Carbon</b>	USP <643>		
Before Packaging		≤ 500 ppb	6.28 ppb
Packaged		≤ 8000 ppb	4180 ppb



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Test	Methodology	Specification	Analysis
<b>Physical Testing</b>			
pH @ 25°C	USP <791>	4.0 – 7.0	5.6
Conductivity @ 25°C	USP <644>, EP 2.2.38		
Before Packaging		≤ 1.3 µS/cm	0.09 µS/cm
Packaged		≤ 5 µS/cm	1.570 µS/cm

The testing that has been performed as part of this lot release has been reviewed by Quality Assurance personnel and it has been confirmed that the testing meets the specifications presented on this Certificate of Analysis.

VANESSA YOUNG  
Name

14 JUL 2023  
Date

QA ASSOCIATE II  
Title