

CERTIFICATE OF ANALYSIS

Product	Water, UHPLC-MS	Batch	19897508
AG0015		Quality release date	05/06/2019
		Expiry date	03/2020
Analysis	Batch value	Specifications	
Conductivity (25°C)	0,9 µS/cm	≤ 1	
Chlorides (Cl)	< 0,000001 %	≤ 0,000001	
Fluorides (F)	< 0,000001 %	≤ 0,000001	
Nitrates (NO ₃)	< 0,00001 %	≤ 0,00001	
Sulfates (SO ₄)	< 0,00001 %	≤ 0,00001	
Aluminium (Al)	< 0,000002 %	≤ 0,000002	
Barium (Ba)	< 0,000002 %	≤ 0,000002	
Cadmium (Cd)	< 0,000002 %	≤ 0,000002	
Calcium (Ca)	< 0,00001 %	≤ 0,00001	
Chromium (Cr)	< 0,000002 %	≤ 0,000002	
Cobalt (Co)	< 0,000002 %	≤ 0,000002	
Copper (Cu)	< 0,000001 %	≤ 0,000001	
Iron (Fe)	< 0,000002 %	≤ 0,000002	
Lead (Pb)	< 0,000002 %	≤ 0,000002	
Magnesium (Mg)	< 0,000002 %	≤ 0,000002	
Manganese (Mn)	< 0,000001 %	≤ 0,000001	
Nickel (Ni)	< 0,000002 %	≤ 0,000002	
Potassium (K)	< 0,000005 %	≤ 0,000005	
Silver (Ag)	< 0,00001 %	≤ 0,00001	
Sodium (Na)	< 0,00001 %	≤ 0,00001	
Tin (Sn)	< 0,00001 %	≤ 0,00001	
Zinc (Zn)	< 0,000002 %	≤ 0,000002	
Residue on evaporation	0,0001 %	≤ 0,0001	
Suitability for use in UHPLC-MS	passes test	passes test	
UV Spectroscopy in a 1,0 cm cell			
min. transmission at 200 nm	99,82 %	≥ 95	
min. transmission at 230 nm	99,85 %	≥ 99	
max. absorbance at 200 nm	0,001 AU	≤ 0,022	
max. absorbance at 230 nm	0,001 AU	≤ 0,004	
Gradient grade (210 nm):			
maximum peak absorbance:	< 0,005 AU	≤ 0,005	
Gradient grade (254 nm):			
maximum peak absorbance:	< 0,001 AU	≤ 0,001	
UHPLC-MS test ESI+	< 5 ppb Reserpin	≤ 5	
UHPLC-MS test ESI-	< 20 ppb Digoxin	≤ 20	

Microfiltered through membranes of pore diameter 0,1 µm.