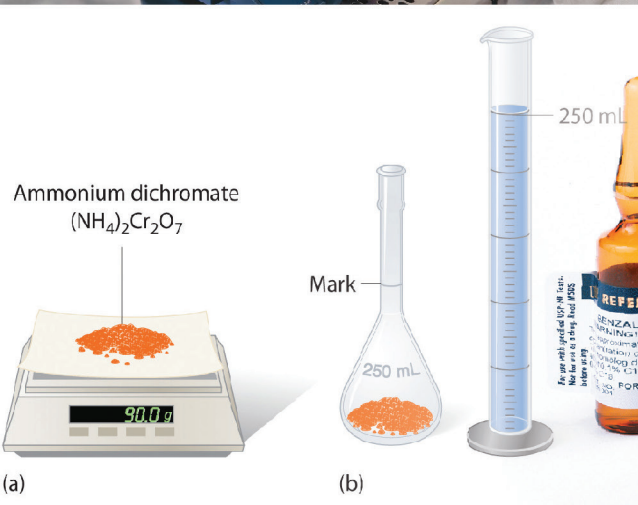


Neutron[®]

Pharmaceutical Co.

CALIBRATION STANDARD SOLUTION AND VOLUMETRIC STANDARD SOLUTION



Responsible For Quality
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Buffer pH 4.00

Calibration Standard Solution

Traceable to secondary reference material

Specification

pH-Value 20°C 4.00 ± 0.02%

0 °C	ΔpH	+0.01
5 °C	ΔpH	+0.01
10 °C	ΔpH	+0.01
15 °C	ΔpH	+0.01
20 °C	ΔpH	±0.00
25 °C	ΔpH	±0.00
30 °C	ΔpH	-0.02
35 °C	ΔpH	-0.02
40 °C	ΔpH	-0.04
50 °C	ΔpH	-0.05

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL ●	5	Liter
2.5	Liter	500	mL ●	10	Liter
		1000	mL ●	20	Liter

Product code: 1.1660.

Technical Information

Density:	1.002 g/cm ³
HS code:	38220000
Storage	Without limitations.
SDS	not required
Form:	liquid

Buffer pH 7.00

Calibration Standard Solution

Traceable to secondary reference material

Specification

pH-Value 20°C 7.00 ± 0.02%

0 °C	ΔpH	+0.01
5 °C	ΔpH	+0.01
10 °C	ΔpH	+0.01
15 °C	ΔpH	+0.01
20 °C	ΔpH	±0.00
25 °C	ΔpH	±0.00
30 °C	ΔpH	-0.02
35 °C	ΔpH	-0.02
40 °C	ΔpH	-0.04
50 °C	ΔpH	-0.05

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL ●	5	Liter
2.5	Liter	500	mL ●	10	Liter
		1000	mL ●	20	Liter

Product code: 1.1670.

Technical Information

Density:	1.01g/cm ³ (20 °C)
HS code:	38220000
Storage	Without limitations.
SDS	Availible
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Solubility in water:	(20 °C) soluble
Boiling point:	109 °C
Melting point:	-5 °C

Buffer pH 9.00

Calibration Standard Solution

Traceable to secondary reference material

Specification

pH-Value 20°C 9.00 ± 0.05%

0 °C	ΔpH	+0.22
5 °C	ΔpH	+0.16
10 °C	ΔpH	+ 0.10
15 °C	ΔpH	+0.05
20 °C	ΔpH	±0.00
25 °C	ΔpH	-0.04
30 °C	ΔpH	-0.07
35 °C	ΔpH	-0.11
40 °C	ΔpH	-0.14
50 °C	ΔpH	-0.16

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL ●	5	Liter
2.5	Liter	500	mL ●	10	Liter
		1000	mL ●	20	Liter

Product code: 1.2260.

Technical Information

Density:	1.00 g/cm ³ (20 °C)
HS code:	38220000
Storage	+15OC to +25OC
SDS	Availible
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Solubility in water:	(20 °C) soluble
Boiling point:	100 °C

Buffer pH 10.00

Calibration Standard Solution

Traceable to secondary reference material

Specification

pH-Value 20 °C **10.00 ± 0.05%**

Temperature (°C)	ΔpH	Value
0 °C	ΔpH	+0.22
5 °C	ΔpH	+0.16
10 °C	ΔpH	+ 0.10
15 °C	ΔpH	+0.05
20 °C	ΔpH	±0.00
25 °C	ΔpH	-0.06
30 °C	ΔpH	-0.10
35 °C	ΔpH	-0.14
40 °C	ΔpH	-0.20
50 °C	ΔpH	-0.27

Glass Bottles		Plastic Bottles			Plastic Gallon	
1	Liter	250	mL	●	5	Liter
2.5	Liter	500	mL	●	10	Liter
		1000	mL	●	20	Liter

Product code: 1.2270.

Technical Information

Density:	1.002 g/cm ³
HS code:	38220000
Storage:	Without limitations.
SDS:	not required
Form:	liquid

Conductivity 12.86 mS/cm

Calibration Standard Solution

Traceable to secondary reference material

Specification

Conductivity @ (25 °C) **12.86 ± 2.0%** mS/cm

Temperature (°C)	Conductivity (mS/cm)
5 °C	8.20
10 °C	9.33
15 °C	10.48
20 °C	11.65
22 °C	12.12
24 °C	12.63
25 °C	12.86
26 °C	13.12
28 °C	13.63
30 °C	14.12
35 °C	15.40
40 °C	16.66
45 °C	17.99
50 °C	19.32

Glass Bottles		Plastic Bottles			Plastic Gallon	
1	Liter	250	mL	●	5	Liter
2.5	Liter	500	mL	●	10	Liter
		1000	mL	●	20	Liter

Product code: 1.1730.

Technical Information

Density:	1.003 g/cm ³
HS code:	28273980
Storage (temperature):	Store at +15 °C to +25 °C
SDS:	Not required
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Boiling point:	100 °C

Conductivity 1.413 mS/cm (1413 μS/cm)

Calibration Standard Solution

Traceable to secondary reference material

Specification

Conductivity @ (25 °C) **1.413 ± 2.0 %** mS/cm

Temperature (°C)	Conductivity (mS/cm)
5 °C	0.890
10 °C	1.015
15 °C	1.145
20 °C	1.273
22 °C	1.324
24 °C	1.378
25 °C	1.408
26 °C	1.434
28 °C	1.491
30 °C	1.547
35 °C	1.685
40 °C	1.836
45 °C	1.981
50 °C	2.137

Glass Bottles		Plastic Bottles			Plastic Gallon	
1	Liter	250	mL	●	5	Liter
2.5	Liter	500	mL	●	10	Liter
		1000	mL	●	20	Liter

Product code: 1.1740.

Technical Information

Density:	1.001 g/cm ³
HS code:	28273980
Storage (temperature):	Store at+15 °C to +25 °C
SDS:	Not required
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Boiling point:	100 °C



Conductivity 84.0 $\mu\text{S/cm}$

Calibration Standard Solution

Traceable to secondary reference material

Specification

Conductivity @ (25°C) **84.0 \pm 5.0 %** $\mu\text{S/cm}$

Temperature (°C)	Conductivity ($\mu\text{S/cm}$)	Conductivity (% of 25°C)
5 °C	65.0	$\mu\text{S/cm}$
10 °C	67.0	$\mu\text{S/cm}$
15 °C	68.0	$\mu\text{S/cm}$
20 °C	76.0	$\mu\text{S/cm}$
22 °C	79.0	$\mu\text{S/cm}$
24 °C	82.0	$\mu\text{S/cm}$
25 °C	84.0	$\mu\text{S/cm}$
26 °C	86.0	$\mu\text{S/cm}$
28 °C	89.0	$\mu\text{S/cm}$
30 °C	92.0	$\mu\text{S/cm}$

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.2310.

Technical Information

Density:	1.002 g/cm ³
HS code:	28273980
Storage:	Store at +15 °C to +25 °C
SDS:	Not required
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Boiling point:	100 °C

Holmium perchlorate Standard Solution for UV - VIS Wavelengths Qualification

Calibration Standard Solution

According to EDQM, pharmacopeia
Traceable to reference standard

Specification

λ 241.1	± 0.5	nm
λ 278.0	± 0.5	nm
λ 287.5	± 0.5	nm
λ 361.2	± 0.5	nm
λ 416.6	± 0.5	nm
λ 451.3	± 0.5	nm
λ 485.3	± 0.5	nm
λ 537.0	± 0.5	nm
λ 640.8	± 0.5	nm

Glass Bottles		Plastic Bottles		Plastic Gallon	
2	Liter	250	mL	5	Liter
5	Liter	500	mL	10	Liter
10	Liter				

Product code: 1.2970.

Technical Information

Density	~ 1.136 g/cm ³ (20°C)
HS Code	38220000
Storage	Storage at 15 to 25 °C
SDS	available
R phrase	R 36/37
S phrase	S 26
Odour	odourless
Form	liquid
Color	weakly pink



Hydrochloric Acid 1N (VS Titrant)

Volumetric Standard Solution

Traceable to secondary reference material

Specification

C (HCL) 1.000 N \pm 0.1 %

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.1700.

Technical Information

Density:	1.02 g/cm ³ (20 °C)
HS code:	28061000
Storage (temperature):	Store at +15 °C to +25 °C
SDS:	available
Odour:	odourless
Form:	liquid
Color:	colourless
Solubility in water:	(20 °C) soluble



Hydrochloric Acid 0.1N (VS Titrant)

Volumetric Standard Solution

Traceable to secondary reference material

Specification

pH-Value 20°C 0.100 N ± 0.05%

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.3030.

Technical Information

Density:	1.0 g/cm ³ (20 °C)
HS code:	28061000
Storage (temperature):	Store at +15 °C to +25 °C
SDS	available
Odour:	odourless
Form:	liquid
Color:	colourless
Solubility in water:	(20 °C) soluble



Iodine solution 0.1 N (VS Titrant)

(Iodine 0.05 mol/l)

Volumetric Standard Solution

Traceable to secondary reference material

1lit= 1.02 g/cm³

Specification

C (I2) 0.100 N ± 0.05%

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.2810.

Technical Information

Density	~ 1.02 g/cm ³ (20°C)
HS Code	38220000
Storage	Storage at 15 to 25°C
SDS	available
Odour	slightly pungent
Form	liquid
Color	dark brown
Solubility in water	soluble(20°C)



Potassium Chloride 3mol/l

Standard Solution

Electrolyte for pH electrode

Specification

Concentration 3.0 M ±0.1%

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.1710.

Technical Information

Density:	1.13 g/cm ³ (20 °C)
HS code:	28273980
Storage (temperature):	Store at +15°C to +25°C
SDS	Available
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Solubility in water	(20 °C) soluble





Potassium dichromate Standard Solution for UV - VIS Absorbance Qualification

Calibration Standard Solution

According to EDQM, pharmacopeia
Traceable to reference standard

Specification

235	nm	124.5	A _{sp}	122.9 to 126.2
257	nm	144.5	A _{sp}	142.8 to 146.2
313	nm	48.6	A _{sp}	47.0 to 50.3
350	nm	107.3	A _{sp}	105.6 to 109.0

Glass Bottles		Plastic Bottles		Plastic Gallon	
2	Liter	250	mL	5	Liter
5	Liter	500	mL	10	Liter
10	Liter				

Product code: 1.3560.

Technical Information

Density	~ 1.0 g/cm ³ (20°C)
HS Code	38220000
Storage	Storage at 15 to 25 °C available
SDS	



Sodium Hydroxide 1N (VS Titrant)

Volumetric Standard Solution

Traceable to secondary reference material

Specification

C (NaOH) 1.00 N ± 0.1%

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.1680.

Technical Information

Density:	1.04 g/cm ³ (20 °C)
HS code:	28151200
Storage (temperature):	Store at +15 °C to +25 °C
SDS	Available
R phrase:	R 34
S phrase:	S 26-36/37/39-45
Odour:	Odourless
Form:	Liquid
Color:	Colourless
Solubility in water:	(20 °C) soluble



Sodium Hydroxide 0.1N (VS Titrant)

Volumetric Standard Solution

Traceable to secondary reference material

Specification

C (NaOH) 0.100 N ±0.2%

Glass Bottles		Plastic Bottles		Plastic Gallon	
1	Liter	250	mL	5	Liter
2.5	Liter	500	mL	10	Liter
		1000	mL	20	Liter

Product code: 1.1690.

Technical Information

Density:	1.00 g/cm ³ (20 °C)
HS code:	28151200
Storage (temperature):	Store at +15 °C to +25 °C
SDS	Available
Odour:	Odourless
FORM:	liquid
Color:	colourless
Solubility in water:	(20 °C) soluble

