

pH buffer solution pH标准缓冲溶液

- 缓冲溶液
- 袋装缓冲液
- 浓缩缓冲液

标准物质是直接影响测定准确度的重要因素。此外，重复的测定成本昂贵并且浪费时间。这是默克为客户提供认证缓冲物质和溶液的原因。

最高品质的二级标准缓冲液

最大误差是 ± 0.003 PH单位，它们非常精确并且适合用于仪器监控

即用型缓冲溶液和Titrisol浓缩液

即用型缓冲溶液的认证测量不确定值是 ± 0.015 pH单位，非常适合日常实验室使用。同样，Titrisol浓缩缓冲液的测量不确定值是 ± 0.02 pH单位。

即用型袋装缓冲液

即用型袋装缓冲液不仅可以确保结果精确，而且有不易污染和保持新鲜的优点。

默克拥有自己的PH测定校准实验室

默克自己的PH测定校准实验室已经经过德国校准协会(DKD) DKD-K-14301方法认证，而且接受DKD或德国联邦物理技术研究所(PTB)的严格审计。所有默克的缓冲物质和溶液都接受这个实验室的质量检测。

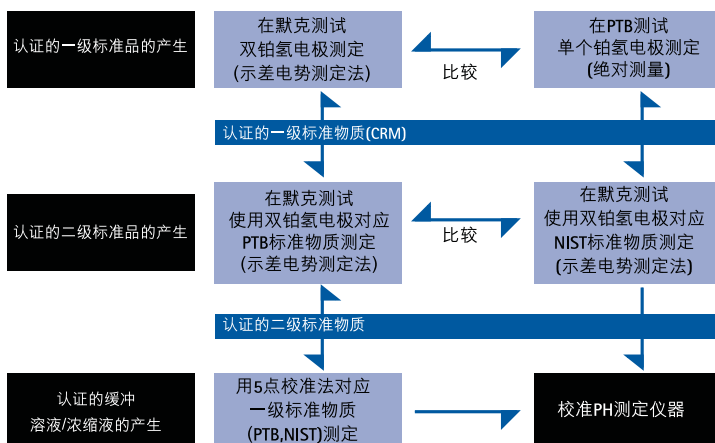
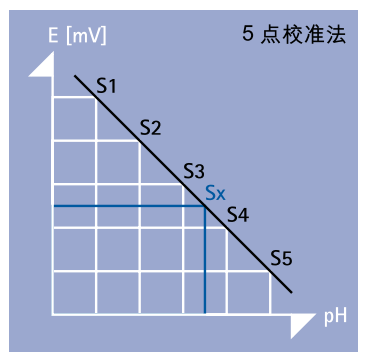
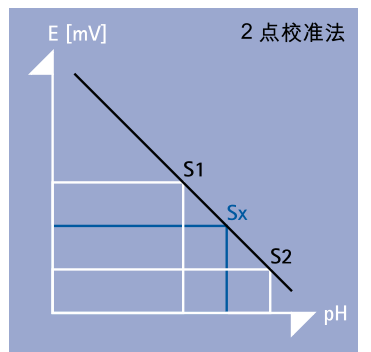
质量控制

默克二级标准物质经过双铂氢电极示差电势测定法检测。该方法测定pH的总体不确定值最大是 ± 0.003 pH单位，因此缓冲液配制可以非常的精确。

为了确保即用型缓冲溶液，Tritrisol®浓缩液或袋装液的精确测量，默克采用了5点校准法（精度为 $\leq \pm 0.015$ 个pH单位或者 ± 0.02 个pH单位）；这种方法比简单的2点法校准精度（ $\geq \pm 0.05$ pH单位）更高。

溯源性

我们的标准物质可以直接溯源到美国国家标准与技术研究所(NIST)和德国联邦物理技术研究所(PTB)的一级标准物质，因此Certipur标准缓冲物质和溶液具有双重溯源性。





实验室分析试剂 Laboratory Analytical Reagents

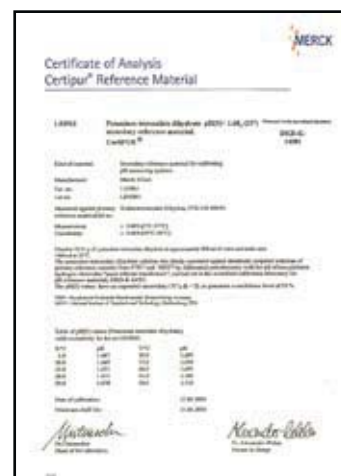
该系列产品用于校准并监控PH测定仪。

最大误差仅有 ± 0.003 pH单位。每个CertiPUR产品都在它的COA中提供有相关数据。

为您提供精确并节省时间和成本的产品。

默克公司提供给PTB分析用的缓冲物质，PTB在经过严格的测定后再将它们制成基准物质。这样的基准物质对于客户来说过于昂贵，因而默克采用同样的原材料制成二级标准物质提供给客户，并用基准物质对其比较定值。

此外。CertiPUR缓冲液/物质均通过NIST的一级标准物质比较定值。



CertiPUR® 二级标准缓冲溶液(25 °C)

名称	pH 值 (25 °C)	包装	订货号
Certipur certified secondary standard reference buffer solution pH 1.681 Potassium tetroxalate dihydrate	1.681	5 x 100 ml	1.07204.0105
Certipur certified secondary standard reference buffer solution pH 4.005 Potassium hydrogen phthalate	4.005	5 x 100 ml	1.07200.0105
Certipur certified secondary standard reference buffer solution pH 6.863 Potassium dihydrogen phosphate/ Disodium hydrogen phosphate	6.863	5 x 100 ml	1.07202.0105
Certipur certified secondary standard reference buffer solution pH 7.416 Potassium dihydrogen phosphate/ Disodium hydrogen phosphate	7.416	5 x 100 ml	1.07205.0105
Certipur pH certified secondary standard reference buffer solution 9.184 Disodium tetraborate decahydrate	9.184	5 x 100 ml	1.07203.0105

CertiPUR® 二级标准缓冲物质(25 °C)

名称	pH 值 (25 °C)	包装	订货号
Certipur certified secondary reference buffer substance Potassium tetroxalate dihydrate	1.681	25 g	1.01961.0025
Certipur certified secondary reference buffer substance Potassium hydrogen tartate	3.639	25 g	1.01963.0025
Certipur certified secondary reference buffer substance Potassium hydrogen phthalate	4.005	25 g	1.01965.0025
Certipur certified secondary reference buffer substance Potassium hydrogen phosphate/ Disodium hydrogen phosphate	6.863 7.416	2 x 25 g	1.01960.0001
Certipur certified secondary reference buffer substance Disodium tetraborate decahydrate	9.184	25 g	1.01964.0025
Certipur certified secondary reference buffer substance Sodium hydrogen carbonate/Sodium carbonate	10.014	2 x 25 g	1.01962.0001

CertiPUR® 袋装缓冲液

即用型缓冲液, 装入特殊材料的密封小袋

所有CertiPUR®袋装缓冲液都可以溯源到NIST和PTB的一级标准物质, 产品均经过默克自己的认证校准实验室采用复合电极和5点校准法分析, 分析方法依据DIN19628,使用的标准缓冲液的配制原料依据DIN19266标准。最大误差值为± 0.015 PH 单位(PH 10: 最大±0.05 PH 单位)。

CertiPUR® 袋装缓冲液(25 °C)

名称	pH 值 (25 °C)	成份	包装	订单号
Certipur buffer solution	2.00	Citric acid Sodium hydroxide Hydrogen chloride	30 sachets à 30 ml	1.99012.0001
Certipur buffer solution	4.01	Potassium hydrogen phtalate	30 sachets à 30 ml	1.99001.0001
Certipur buffer solution	7.00	Disodium hydrogen phosphate Potassium dihydrogen phosphate	30 sachets à 30 ml	1.99002.0001
Certipur buffer solution	9.00	Boric acid Sodium hydroxide Potassium chloride	30 sachets à 30 ml	1.99003.0001
Certipur buffer solution	10.00	Boric acid Sodium hydroxide Potassium chloride	30 sachets à 30 ml	1.99004.0001
Certipur buffer solution	12.00	Disodium hydrogen phosphate Sodium hydroxide	30 sachets à 30 ml	1.99022.0001
Certipur buffer solution Set I	4.01 7.00 9.00		3 x 10 sachets à 30 ml	1.99005.0001
Certipur buffer solution Set II	4.01 7.00 10.00		3 x 10 sachets à 30 ml	1.99006.0001
Certipur buffer solution	9.18	Disodium tetraborate	3 x 10 sachets à 30 ml	1.99019.0001
Certipur buffer solution	11.00	Boric acid Sodium hydroxide Potassium chloride	3 x 10 sachets à 30 ml	1.99021.0001

袋装缓冲溶液的优点

- 打开即用
- 30ml包装一次性使用
- 确保精确的PH值
- 不易被污染
- 无残留
- 容易使用
- 包含批次细节的分析报告 (可溯源到NIST和PTB)





实验室分析试剂 Laboratory Analytical Reagents

即用型缓冲溶液

所有CertiPUR®缓冲溶液都可以溯源到NIST和PTB的标准物质。它们在默克自己独立的校准实验室采用复合电极和5点校准法(依据 DIN 19628方法)测定, 配制标准缓冲溶液所用的原料依据DIN 19266标准, 误差最大值是± 0.015个 PH单位(PH 10, 11: 最大± 0.05个 PH单位)



CertiPUR® 缓冲液 (20 °C)

名称	pH 值 (20 °C)	成份	包装	订货号
Certipur buffer solution	1.00	Glycine Sodium chloride Hydrogen chloride	1,000 ml	1.09432.1000
Certipur buffer solution	2.00	Citric acid Sodium hydroxide Hydrogen chloride	1,000 ml 4 l Titripac® 10 l Titripac®	1.09433.1000 1.09433.4000 1.09433.9010
Certipur buffer solution	3.00	Citric acid Sodium hydroxide Hydrogen chloride	1,000 ml	1.09434.1000
Certipur buffer solution	4.00	Citric acid Sodium hydroxide Hydrogen chloride	1,000 ml 10 l Titripac® 4 l Titripac®	1.09435.1000 1.09435.9010 1.09435.4000
Certipur buffer solution	4.66	Acetic acid Sodium acetate	1,000 ml	1.07827.1000
Certipur buffer solution	5.00	Citric acid Sodium hydroxide	1,000 ml	1.09436.1000
Certipur buffer solution	6.00	Citric acid Sodium hydroxide	1,000 ml 4 l Titripac®	1.09437.1000 1.09437.4000
Certipur buffer solution	6.88	Disodium hydrogen phosphate Potassium dihydrogen phosphate	1,000 ml	1.07294.1000
Certipur buffer solution	7.00	Disodium hydrogen phosphate Potassium dihydrogen phosphate	1,000 ml 10 l Titripac® 4 l Titripac®	1.09439.1000 1.09439.9010 1.09439.4000
Certipur buffer solution	8.00	Boric acid Sodium hydroxide Hydrogen chloride	1,000 ml	1.09460.1000
Certipur buffer solution	9.00	Boric acid Sodium hydroxide Potassium chloride	1,000 ml 10 l Titripac® 4 l Titripac®	1.09461.1000 1.09461.9010 1.09461.4000
Certipur buffer solution	9.22	Disodium tetraborate	1,000 ml	1.01645.1000
Certipur buffer solution	10.00	Boric acid Sodium hydroxide Potassium chloride	1,000 ml 10 l Titripac® 4 l Titripac®	1.09438.1000 1.09438.9010 1.09438.4000
Certipur buffer solution	11.00	Boric acid Sodium hydroxide Potassium chloride	1,000 ml	1.09462.1000
Certipur buffer solution	12.00	Potassiumhydrogen-phosphate Sodium hydroxide	4 l Titripac®	1.99022.4000

Certipur® 缓冲液 (25 °C)

名称	pH 值 (25 °C)	成份	包装	订货号
Certipur buffer solution	4.01	Potassium hydrogen phthalate	1,000 ml	1.09406.1000
Certipur buffer solution	7.00	Disodium hydrogen phosphate Potassium dihydrogen phosphate	1,000 ml	1.09407.1000
Certipur buffer solution	9.00	Boric acid Sodium hydroxide Potassium chloride	1,000 ml	1.09408.1000
Certipur buffer solution	10.00	Boric acid Sodium hydroxide Potassium chloride	1,000 ml	1.09409.1000

Certipur® 缓冲液 (25 °C) – 色标

名称	pH 值 (25 °C)	成份	包装	订货号
Certipur buffer solution	4.00 [red]	Citric acid Sodium hydroxide Hydrogen chloride	500 ml 10 l Titripac® 4 l Titripac®	1.09475.0500 1.09475.9010 1.09475.4000
Certipur buffer solution	7.00 [green]	Disodium hydrogen phosphate Potassium dihydrogen phosphate	500 ml 10 l Titripac® 4 l Titripac®	1.09477.0500 1.09477.9010 1.09477.4000
Certipur buffer solution	9.00 [blue]	Boric acid Potassium chloride Sodium hydroxide	500 ml 10 l Titripac® 4 l Titripac®	1.09476.0500 1.09476.9010 1.09476.4000
Certipur buffer solution	10.00 [yellow]	Boric acid Potassium chloride Sodium hydroxide	500 ml 10 l Titripac® 4 l Titripac®	1.09400.0500 1.09400.9010 1.09400.4000





实验室分析试剂 Laboratory Analytical Reagents

Titrisol®浓缩pH缓冲液

所有Titrisol浓缩缓冲液都可以溯源到NIST 和PTB的标准物质。它们都经过了默克自己独立的认证校准实验室的分析，所用方法使用了玻璃电极并依据DIN 19628方法进行5点标定，配制标准缓冲液用到的标准物质均符合DIN 19266标准。其最大误差在±0.02 PH单位(PH10, 11, 12, 13: 最大±0.05 PH单位)。



Titrisol®用于配成500ml溶液的浓缩液 (20 °C)

名称	pH 值 (20 °C)	成份	包装	订货号
Buffer Titrisol®	1.00	Glycine, Sodium chloride, Hydrogen chloride	1 ampoule	1.09881.0001
Buffer Titrisol®	2.00	Citric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09882.0001
Buffer Titrisol®	3.00	Citric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09883.0001
Buffer Titrisol®	4.00	Citric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09884.0001
Buffer Titrisol®	5.00	Citric acid, Sodium hydroxide	1 ampoule	1.09885.0001
Buffer Titrisol®	6.00	Citric acid, Sodium hydroxide	1 ampoule	1.09886.0001
Buffer Titrisol®	7.00	Disodium hydrogen phosphate, Potassium dihydrogen phosphate	1 ampoule	1.09887.0001
Buffer Titrisol® acc. to Weise	7.20	Disodium hydrogen phosphate, Potassium dihydrogen phosphate	1 ampoule	1.09879.0001
Buffer Titrisol®	8.00	Boric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09888.0001
Buffer Titrisol®	9.00	Boric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09889.0001
Buffer Titrisol®	10.00	Boric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09890.0001
Buffer Titrisol®	11.00	Boric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09880.0001
Buffer Titrisol®	12.00	Potassium dihydrogen phosphate, Sodium hydroxide	1 ampoule	1.09892.0001
Buffer Titrisol®	13.00	Potassium chloride, Sodium hydroxide	1 ampoule	1.09893.0001

Titrisol®用于配成500ml溶液的缓冲液 (20 °C) - 色标

名称	pH value	成份	包装	订货号
Buffer Titrisol®	4.00 [red]	Citric acid, Sodium hydroxide, Hydrogen chloride	1 ampoule	1.09846.0001
Buffer Titrisol®	7.00 [green]	Disodium hydrogen phosphate, Potassium dihydrogen phosphate	1 ampoule	1.09848.0001