Genemill Biotechnology Co., Ltd.

防腐剤, グッドバッファー製造メーカー

■ 会社概要

- 本社 中国 蘇州市
- 2013年 設立

■ 主要分野

- 診断薬用防腐剤

  グローバルPC市場シェア 50%
- バイオ医薬品用バッファー

■ 主要製品群

- **防腐剤 - 診断薬製造用途**
  - ✓ NeoCide PC-150
  - ✓ NeoCide PC-200
  - ✓ NeoCide PC-300
  - ✓ NeoCide PC-950
  - ✓ GML-2
  - ✓ GML-3 DMDMH 55%
  - ✓ BND-10 Bronidox 10%溶液
  - ✓ BND-99 Bronidox
  - ✓ BIT-10
  - ✓ PC-8020
  - ✓ etc

■ ISO認証

- ✓ **ISO 9001: 2015 Certificate**
- ✓ **ISO 13485: 2016 Certificate**

- **バッファー, その他**
  - ✓ NeoCide Tris
  - ✓ NeoCide Tris HCl
  - ✓ NeoCide CapsoNa
  - ✓ ADA
  - ✓ Pipes
  - ✓ Hepes
  - ✓ etc

■ 海外主要顧客

Autobio, Beckman Coulter, Eisai, Lilly, mindray 迈瑞, Pfizer, Snibe Diagnostic, ThermoFisher Scientific, YHLO

■ お問合せ先

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Good's Buffer (Biological Buffers)

Genemill Part Number	Goods Buffers	CAS#	25° C pKa	Range	M.W	Descriptions	GRADE (equivalent)
[GB02001] [GB02002]	MES MES Sodium	145224-94-8 71119-23-8	6.1	5.5-6.7	213.3 217.2	MES monohydrate MES sodium salt	99.5% AR/ACS/Bio-ultra 99.5% AR/ACS/Bio-ultra
[GB02003]	Bis-Tris	6976-37-0	6.5	5.8-7.2	209.2	Bis(2-hydroxyethyl)aminotris(hydroxymethyl)methane	99.5% AR/ACS/Bio-ultra
[GB02005]	ADA	26239-55-4	6.6	6.0-7.2	190.2	N-(2-Acetamido) iminodiacetic Acid	99.0% AR/ACS/Bio-ultra
[GB02007]	ACES	7365-82-4	6.8	6.1-7.5	182.2	N-(2-Acetamido)-2-aminoethanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02009] [GB02010]	PIPES PIPES 1/2 Sodium	5625-37-6 100037-69-2	6.8	6.1-7.5	302.4 670.7	PIPES PIPES sesquisodium salt	99.5% AR/ACS/Bio-ultra 99.5% AR/ACS/Bio-ultra
[GB02011]	MOPSO	68399-77-9	6.9	6.2-7.6	225.3	2-Hydroxy-3-morpholinopropanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02013]	BES	10191-18-1	7.1	6.4-7.8	213.2	N,N-Bis(2-hydroxyethyl)-2-aminoethanesulfonic	99.0% AR/ACS/Bio-ultra
[GB02015]	MOPS	1132-61-2	7.2	6.5-7.9	209.3	3-Morpholinopropanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02017]	HEPES	7365-45-9	7.5	6.8-8.2	238.3	2-[4-(2-Hydroxyethyl)-1-piperazinyl]ethanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02019]	TES	7365-44-8	7.4	6.8-8.2	229.2	N-Tris(hydroxymethyl)methyl-2-aminoethanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02021]	DIPSO	68399-80-4	7.6	7.0-8.2	243.3	3-[N,N-Bis(2-hydroxyethyl)amino]-2-hydroxypropanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02023]	TAPSO	68399-81-5	7.6	7.0-8.2	259.3	3-[N-Trismethylamino]-2-hydroxypropanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02025]	TRIS/Trizma Base Tris HCL	77-86-1 1185-53-1	8.1	7.0-9.1	121.1 156.6	Tris(hydroxymethyl)aminomethan Tris HCL	99.5% AR/ACS/Bio-ultra 99.5% AR/ACS/Bio-ultra
[GB02027]	HEPPSO	68399-78-0	7.8	7.1-8.5	268.3	4-(2-Hydroxyethyl)piperazine-1-(2-hydroxypropane-3-sulfonic Acid)	99.5% AR/ACS/Bio-ultra
[GB02029]	POPSO	68189-43-5	7.8	7.2-8.5	362.4	Piperazine-1,4-bis(2-hydroxy-3-propanesulfonicacid)	99.5% AR/ACS/Bio-ultra
[GB02031]	EPPS	16052-06-5	8.0	7.3-8.7	252.3	4-(2-Hydroxyethyl)-1-piperazinepropanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02033]	Tricine	5704-04-1	8.1	7.4-8.8	179.2	N-3-Hydroxymethyl Tricine	99.5% AR/ACS/Bio-ultra
[GB02035]	Bicine	150-25-4	8.3	7.6-9.0	163.2	N,N-Di(2-hydroxyethyl) glycine	99.5% AR/ACS/Bio-ultra
[GB02037]	TAPS	29915-38-6	8.4	7.7-9.1	243.3	N-Tris(hydroxymethyl)methyl-3-aminopropanesulfonic Aci	99.5% AR/ACS/Bio-ultra
[GB02039]	CHES	103-47-9	9.3	8.6-10.0	207.3	2-Cyclohexylaminoethanesulfonic Acid	99.5% AR/ACS/Bio-ultra
[GB02041] [GB02042]	CAPSO CAPSO Sodium	73463-39-5 102601-34-3	9.6	8.9-10.3	237.3 259.3	3-Cyclohexylamine-2-Hydroxyl-1-CAPSO 3-Cyclohexylamine-2-Hydroxyl-1-CAPSO Sodium Salt	99.5% AR/ACS/Bio-ultra 99.5% AR/ACS/Bio-ultra
[GB02043]	AMP	124-68-5	9.7	9.0-10.5	89.1	2-Amino-2-methyl-1-propanol	95% AR/ACS/Bio-ultra
[GB02045]	CAPS	1135-40-6	10.4	9.7-11.1	221.3	3-Cyclohexylaminopropanesulfonic Acid	99.5% AR/ACS/Bio-ultra

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Good's Buffer (Biological Buffers)

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Introduction to buffers:

Biological buffers allow the pH of an aqueous solution to remain constant while the concentration of hydrogen ions present changes. The traditional buffering systems, like carbonate and phosphate buffers, are widely used, but are often not appropriate for many biological systems. These reagents do not buffer effectively above pH 7.5, and can interfere with some biological reactions.

Dr. Norman Good et al. in 1966 described a series of zwitterionic buffers that addressed the above limitations, for research in biology and biochemistry. Typically, these "Good's buffers" have pKa values at or near physiological pH, are non-toxic to cells, and are not absorbed through cell membranes. The concentration, temperature, and ionic composition of the medium has minimal affect on the buffering capacity. These buffers are resistant to enzymatic and non-enzymatic degradation. Furthermore, they are essentially transparent to visible and ultraviolet light, and they are relatively inexpensive. These so-called "Good's Buffers" are widely used in cell culture, IVD and other biological applications. Since then, additional zwitterionic buffers (AMPSO, CAPSO, DIPSO, HEPPSO, MOPSO, and POPSO) have been developed. These compounds offer even further improvements in water solubility, high chemical stability, and compatibility in a number of biological systems (Ferguson et al., 1980). *Reference: Good, N.E., et al. (1966) Hydrogen Ion Buffers for Biological Research. Biochemistry 5(2), 467-477*

Good's buffers characteristics:

Good's buffers characteristics include: pKa value between 6.0 and 8.0, high solubility, non toxicity, limited effect on biochemical reactions, very low absorbance between 240 nm and 700 nm, enzymatic and hydrolytic stability, minimal changes due to temperature and concentration, limited effects due to ionic or salt composition of the solution, limited interaction with mineral cations, and limited permeability of biological membranes.

Buffer requirements:

In biological experiments, it is important to maintain the pH of the solutions used, i.e. most biological reactions occur at a neutral pH while some reactions (i.e. peroxidase enzyme) or processes (coating on polystyrene) need acidic or alkaline pH. Mixtures of appropriate weak acids and their conjugate bases, known as buffering agents, are usually used. The biological buffers needs to be effective in the neutral range from 6 to 8 pH, in order to be useful for cell culture in vitro, enzyme assays and some electrophoretic applications at physiological pH.

Furthermore, universally applicable buffers for biochemistry must be water soluble, not interfere with biological processes or biological membranes (penetration, solubilization, adsorption on surface, etc.), should not produce chelates or have known complex-forming tendency with metal ions (which are essential in biological systems), be non-toxic and have a very low U.V. absorption at wavelength >260 nm.

Buffer choice:

pH influences the chemistry of amino acids and can therefore greatly influence protein structure and function. Even small changes in pH can lead to protein unfolding, aggregation, functional inactivity and even affect molecular interactions including enzyme, antibody, protein-protein and protein-ligand. Therefore, the first thing to do is to determine at which pH you need to work. For example, if you're working on an enzyme assay, choose a pH where your enzyme works at its maximum activity. Or if you're planning an ion exchange purification, choose the right pH to have your protein charged as it's needed. A buffer should have a pKa value that is within one pH of the desired pH.

Water Solubility & Salt Effects. The solubility of a buffer is extremely important. It's necessary that most buffers are highly soluble in water. It's also necessary that they are minimally soluble in most organic solvents. This is important because most biological systems will naturally use water as a solvent. The greater the water solubility of a buffer, the easier it is to prepare a concentrated stock solution. It's important to note that upon dilution, the pH of stock solutions may change. Salt can seriously affect the outcome of an experiment since most biological systems are easily affected by salts. Described many of the attributes of a good buffer, including the necessity of minimal salt effects. Salts may create reactions that will cause complications and possibly affect the outcome of the research. However, salts are sometimes added during an experiment to make adjustments to improve the compound's buffer capacity.

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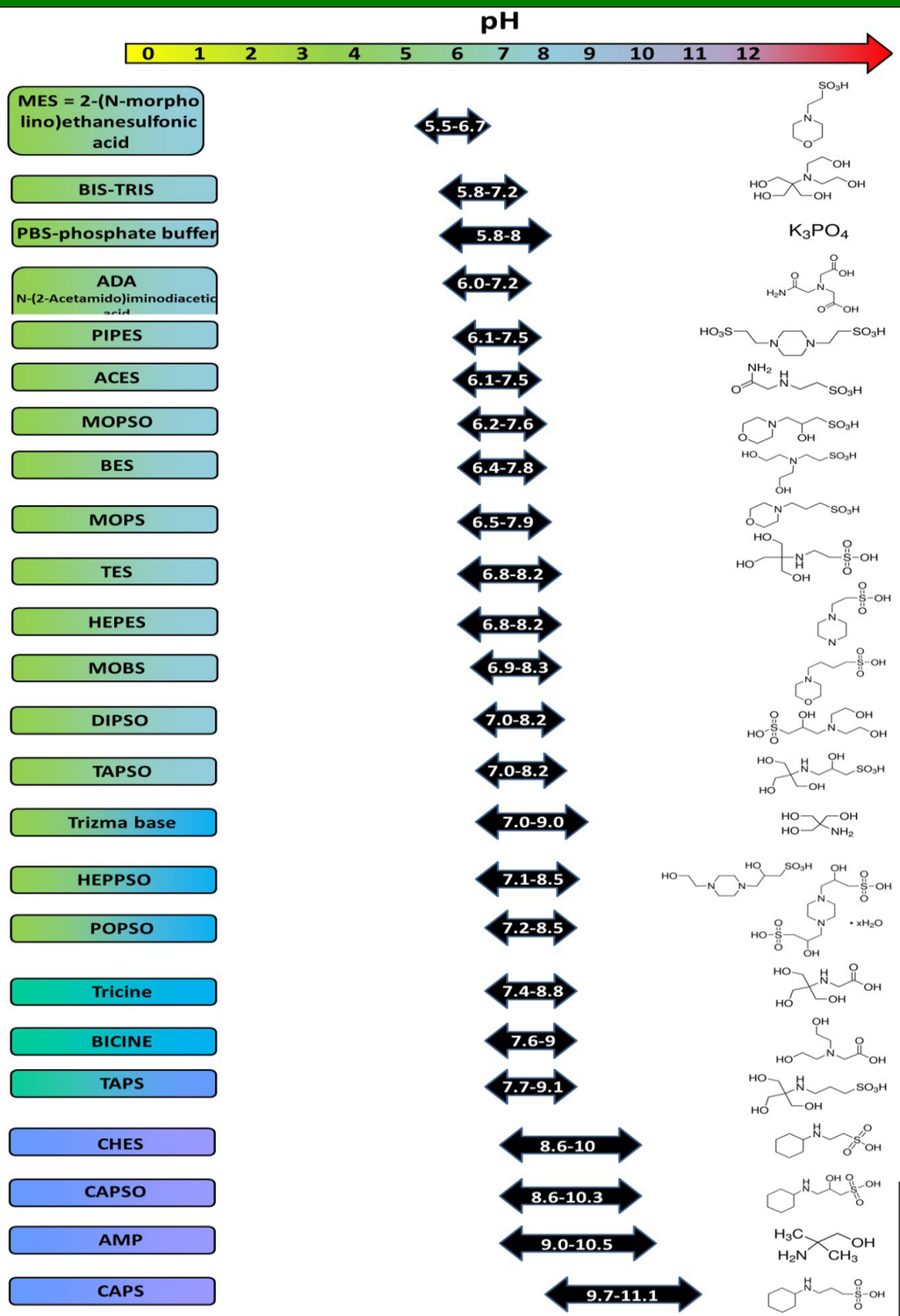

Package Size
100g/bottle
500g/bottle
1Kg/bottle
10Kg/drum
25Kg/drum

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