



### Advantages of GR ACS Reagents from EMD Chemicals

#### Our commitment

As an affiliate of Merck KGaA, we have been in the business of making chemicals for over 300 years.

We promptly notify you of market events likely to disrupt new material supply, such as force majeures, plant closings and unplanned maintenance/repair turn-arounds.

As a matter of protocol, EMD routinely audits our raw material manufacturers and pre-qualifies multiple global sources to assure reliable supply.

#### Production excellence

As a manufacturer we take great pride in our production facilities and welcome audits of our sites. We understand the importance direct interaction, accountability and the ability to move quickly on any quality related issues plays in our customer relationships.

Our facilities are ISO 9001 and RC 14001 certified.

Being a primary manufacturer gives us the flexibility to provide you with customized products, sizes, packaging, and certifications.

Regulatory system that notifies registered customers of raw material or production changes.

#### We keep our specs up-to-date

Through our involvement with ACS' Committee on Analytical Reagents, we are able to take the lead in conforming our GR ACS Reagents to the latest published specifications.

The signatures on EMD's C of A's are those of our employees.

C of A's & MSDS are readily accessible on our website or by phone.

#### Our products are widely distributed

Global distribution through our corporate parent, Merck KGaA

Available through a wide variety of distributors throughout the U.S.

No need to validate a new product in the event of switching to a different distributor

Large production lots result in less lot-to-lot variability.

# Our support teams are among the best in the business

Our Technical Service team is well versed in a wide variety of practical lab applications and has years of hands on experience to draw on for problem solving.

Our Customer Service team is recognized as among the best in the business and consistently wins awards for supplier call center excellence.



### **ACS** Reagents

EMD Chemicals' GR ACS Reagents are suitable for a multitude of uses in the analytical laboratory. The designation "GR" stands for Guaranteed Reagent, a term first used by Emmanuel Merck in 1888. It was his guarantee of a consistent, high quality product. In that tradition, as part of Merck KGaA, Darmstadt, Germany, EMD Chemicals is pleased to offer GR ACS Reagents that meet or exceed American Chemical Society (ACS) specifications detailed in the 10th edition of Reagent Chemicals: Specifications and Procedures (2006).

#### Setting the Standard

At this time, the ACS is the only organization in the world that sets requirements and develops validated test methods for establishing the purity of reagent chemicals. These specifications are set by ACS' Committee on Analytical Reagents. For nearly 20 years, Charles W. Wilson, EMD's Quality Assurance Manager, has been an active member of this committee, integrally involved in setting the industry standards for new reagents. And it is his name that is found at the bottom of each Certificate of Analysis of EMD's GR ACS Reagents.

#### **USP/NF** Monograph Testing

Pharmaceutical, Nutritional, Food, and Cosmetic companies produce United States Pharmacopoeia/National Formulary (USP/NF) finished products or use USP/NF raw materials in their manufacturing operations. Requirements for analytical reagents that may be used in the testing of these USP/NF materials are specified in the Reagents, Indicators, and Solutions section of the USP. Only reagents that conform to these specifications may be used for the testing of USP/NF products. In this brochure, all EMD reagents that meet these specifications are denoted by the designation "Meets Reagent Specifications for testing USP/NF monographs."



#### Tradition of Innovation

From thin layer chromatography (TLC) plates introduced in the 1950's and Proteinase K developed in the 1970's, to the green chemistry of today's ionic liquids, Merck KGaA continues to deliver innovative products that positively impact the way that scientific research is conducted around the world.

In that tradition, EMD led the way by being first to offer a tamper-evident, rectangular, dry-powder bottle to the North American market and more recently by launching a tamper-evident cap for organic solvents. Before that, EMD became the first US supplier to offer high purity solvents in returnable, stainless steel

EM ReCycler® containers. The patented Prolift® carton was introduced in the 1990's to help EMD's customers avoid back injuries by making it easier to lift and carry heavy multi-bottle cases. More recently the inserts used in these cartons were changed from expanded polystyrene (EPS) to recyclable hexacomb paperboard to enable EMD's customers to reduce their storage, waste, and disposal costs.

#### Investment in Quality

Over the past 20 years, EMD has invested more than \$40 million in its reagents manufacturing and packaging facility in Cincinnati, OH. The plant has doubled in size since 1995, as have the number of warehouses. A new tank farm for solvents was relocated to facilitate distillation and automated filling operations were installed for both solvents and dry powders. At the same time, EMD has continuously invested in state-of-the-art analytical instrumentation for its Product Development and Quality Control laboratories.

#### **Customer Focus**

Much of EMD's reputation and success is founded on ensuring customer satisfaction before, during, and after the sale. A wealth of information about all EMD products is easily accessible to customers 24 hours a day, 7 days a week, via our website www.emdchemicals.com/analytics where Certificates of Analysis, Material Safety Data Sheets, Certificates of Origin, product specifications, literature, and other useful documents can be accessed with just a few mouse clicks.

Yet, EMD remains one of the few companies where each caller to its toll-free line is greeted by a live operator instead of an interminable maze of computerized menus, characteristic of so many chemical suppliers today. Award-winning Customer Service and Technical Service is just a phone call away at 800-222-0342.

### **GR ACS Acids**

EMD's GR ACS Acids exceed ACS requirements by listing test results for 15 different metals including: Aluminum, Nickel, Chromium, Copper, Lead, Magnesium and Zinc. These acids have comprehensive specifications providing laboratory personnel the quality assurance they demand.

In addition to more conventional packaging options, including clear glass bottles in 500mL, 1L and 2.5L sizes, amber glass 4L bottles, as well as 6.5 gallon glass carboys and 55 gallon high density poly drums, several of our GR ACS Acids are available in safe and easy-to-use 25L poly containers. These containers are sturdier, safer, lighter and much less awkward to use than traditional glass carboys.

EMD's GR ACS Acids also feature novel polycoated labels that resist corrosion in the event of acid drips or spills, and are color-coded to match the acid caps for ease of identification.

### **GR ACS Solvents**

EMD's GR ACS Solvents are manufactured using the same base ingredients we use for our higher grade solvents such as our OmniSolv® line of high purity solvents. And though designated as ACS grade they actually exceed ACS requirements having fewer impurities to start. This additional quality means you can trust EMD GR ACS solvents to deliver error-free, consistent results in your laboratory processes and applications day in and day out.

These solvents are packaged in amber glass, poly-coated glass, all poly, and metal containers in sizes that vary from 50mL up to 4L, as well as larger volume units including 20L metal pails and 55 gallon metal drums. For customers that require high volumes of solvents, EM ReCycler® returnable bulk stainless steel containers are available in sizes ranging from 18.9L to 1250L.

### **GR ACS Salts**

EMD Chemicals offers the widest selection of ACS grade salts available on the market – both in terms of the individual chemicals offered, as well as the variety of pack sizes. Many of the inorganic salts are supplied by our parent company, Merck KGaA, Darmstadt, Germany, who has been manufacturing some salts for over 150 years.

Dry salts in quantities from 100g to 5kg are supplied in either wide-mouth amber glass or wide-mouth poly bottles. The rectangular-sided space-saving poly bottles are constructed of a special inert polymer blend to minimize product contamination and feature tamper-evident ratchet caps with high-precision moisture barrier seals for added peace of mind. Packaging options for bulk sizes include lightweight poly pails and fiber drums with poly liners.



Acetic Acid,	Glacial, GR A	CS	Aluminum N	litrate, Nona	hydrate, GR ACS	Ammonium	Nitrate, GR	ACS
		ing USP/NF monographs	AX0705-1	500g	Glass Bottle			esting USP/NF monograph
AX0073-6	500mL	Glass Bottle	AX0705-3	2.5kg	Glass Bottle	AX1315-1	500g	Poly Bottle
AX0073P-5	500mL	Poly Coated Glass Bottle	AX0705-20	50kg	Fiber Box w/bag	AX1315-3	2.5kg	Poly Bottle
AX0073-9	2.5L	Glass Bottle	Aluminum S	ulfate, Octad	ecahydrate, GR ACS	AX1315-20	50kg	Fiber Box w/bag
AX0073-75	2.5L	Poly Coated	AX0735-1	500g	Poly Bottle	Ammonium	Oxalate, Mo	nohydrate, GR AC
AV0072 70	251	Glass Bottle	AX0735-3	2.5kg	Poly Bottle	Meets Reagent Sp AX1325-2	ecifications for to 250q	esting USP/NF monograph Poly Bottle
AX0073-78 AX0073-21	25L	Poly Carboy		nanol, GR AC		AX1325-1	500g	Poly Bottle
	211kg	Poly Drum	AX0906-1	500mL	Glass Bottle	AX1325-20	50kg	Fiber Drum w/bag
Acetic Anhyo	dride, GR ACS		AX0906-5	4L	Glass Bottle	Ammonium	Persulfate. (	GR ACS
Meets Reagent Spe AX0080-6	ecifications for test 500mL	ing USP/NF monographs Glass Bottle	AX0906-7	18.9L	Poly Pail			
AX0080-5	3.78L	Glass Bottle	Ammonium,	, GR ACS		AX1340-1	500g	esting USP/NF monograph Poly Bottle
AX0080-7	18.9L	Poly Pail			esting USP/NF monographs	AX1340-3	2.5kg	Poly Bottle
AX0080-30	204L	Poly Drum	AX1220-1	500g	Poly Bottle	AX1340-7	12kg	Poly Pail
Acetone, GR			AX1220-3	2.5kg	Poly Bottle	AX1340-20	50kg	Fiber Drum w/bag
			AX1220-5 AX1220-20	12kg	Poly Pail	Ammonium	Phosphate, I	Dibasic, GR ACS
<b>Vleets Reagent Spe</b> 4X0120-11	ecifications for test 100mL	ing USP/NF monographs Glass Bottle		50kg	Fiber Drum w/bag			esting USP/NF monograph
AX0120-13	500mL	Glass Bottle	Ammonium	Chloride, GR	ACS	AX1355-1	500g	Poly Bottle
AX0120-6	500mL	Glass Bottle			esting USP/NF monographs	AX1355-3	2.5kg	Poly Bottle
AX0120-9	1L	Poly Bottle	AX1270-1	500g	Poly Bottle Poly Bottle	AX1355-20	45kg	Fiber Drum w/bag
AX0120-2	1L	Glass Bottle	AX1270-7	2kg	,	Ammonium	Phosphate, I	Monobasic, GR AC
X0120-14	4L	Glass Bottle	AX1270-5 AX1270-20	12kg 50kg	Poly Pail Fiber Box w/bag	Meets Respent Sp	ecifications for to	esting USP/NF monograph
X0120-8	4L	Glass Bottle				AX1350-1	500g	Poly Bottle
X0120T-4	4L	Metal Can	Ammonium	Citrate, Diba	isic, GK ACS	AX1350-7	12kg	Poly Pail
X0120P-4	4L	Poly Coated	Meets Reagent Sp AX1285-1	pecifications for to 500g	sting USP/NF monographs Poly Bottle	AX1350-20	50kg	Fiber Box w/bag
		Glass Bottle	AX1285-1 AX1285-3	2.5kg	Poly Bottle	Ammonium	Sulfate, GR	ACS
AX0120-23	18.9L	Poly Pail	AX1285-3 AX1285-20	50kg	Fiber Box w/bag	Meets Reagent Sn	ecifications for te	esting USP/NF monograph
X0120-3	20L	Metal Can				AX1385-1	500g	Poly Bottle
XX0120-30	200L	Poly Drum	Ammonium	Fluoride, GR	ACS	AX1385-3	2.5kg	Poly Bottle
X0120-20	200L	Metal Drum	Meets Reagent Sp AX1295-1	pecifications for to 500q	esting USP/NF monographs Poly Bottle	AX1385-5	12kg	Poly Pail
Acetonitrile,	GR ACS		AX1295-20	50kg	Fiber Drum w/bag	AX1385-20	50kg	Fiber Drum w/bag
		ing USP/NF monographs		Hydroxide, 0		Ammonium	Thiocyanate	, GR ACS
AX0149-6	500mL	Glass Bottle		,		Meets Reagent Sp	ecifications for to	esting USP/NF monograph
X0149-1	4L	Glass Bottle	Meets Reagent Sp AX1303-6	pecifications for to 500mL	sting USP/NF monographs Glass Bottle	AX1415-1	500g	Poly Bottle
AX0149-3	20L	Metal Can	AX1303P-5	500mL	Poly Coated	AX1415-5	2.5kg	Poly Bottle
AX0149-20	200L	Metal Drum			Glass Bottle	<b>Antimony Tr</b>	ichloride, Gl	R ACS
Acetyl Chlori			AX1303-3	2.5L	Glass Bottle	Meets Reagent Sp	ecifications for to	esting USP/NF monograph
AX0186-1	500g	Glass Bottle	AX1303-75	2.5L	Poly Coated Glass Bottle	AX1675-1	500g	Poly Bottle
Alcohol, Rea	gent, GR ACS		AX1303-5	21.8kg	Glass Bottle	Arsenic Trio	xide, GR ACS	5
AX0441-13	500mL	Glass Bottle	AX1303-21	170kg	Poly Drum			esting USP/NF monograph
AX0441-6	500mL	Glass Bottle			Tetrahydrate, GR	AX1745-2	100g	Glass Bottle
X0441-14	4L	Poly Bottle	ACS	iviolyouate,	retranyurate, on	AX1745-1	500g	Poly Bottle
X0441-3	4L	Poly Bottle			C LICDAIE	Ascorbic Aci	d, GR ACS	
X0441-7	4L	Poly Coated Glass Bottle	AX1310-3	pecifications for to	esting USP/NF monographs Poly Bottle	AX1775-3	100g	Poly Bottle
X0441T-4	4L	Metal Can	AX1310-1	500g	Poly Bottle	AX1775-2	250g	Poly Bottle
X0441-5	20L	Metal Can	AX1310-5	2.5kg	Poly Bottle	AX1775-5	2.5kg	Poly Bottle
X0441-20	208L	Metal Drum	AX1310-31	45kg	Fiber Drum w/bag	<b>Barium Chlo</b>	ride, Dihydr	ate, GR ACS
					-	Meets Reagent Sp	ecifications for to	esting USP/NF monograpl
Aluminon G						BX0060-1	500g	Poly Bottle
Aluminon, Gl		ing USP/NF monographs				DX0000 1	5009	roly bottle

			OD 400					
Meets Reagent Sp BX0220-11	pecifications for te 100mL	sting USP/NF monographs Glass Bottle	GR ACS  Meets Reagent Sp	ecifications for to	esting USP/NF monographs	Meets Reagent Sp CX1055-11	pecifications for to 100mL	esting USP/NF monograph Glass Bottle
3X0220-13	500mL	Glass Bottle	CX0156-1	500g	Poly Bottle	CX1055-13	500mL	Glass Bottle
3X0220-6	500mL	Glass Bottle	CX0156-3	2.5kg	Poly Bottle	CX1055-6	500mL	Glass Bottle
X0220-14	4L	Glass Bottle	CX0156-30	50kg	Fiber Drum w/bag	CX1055-2	1L	Glass Bottle
X0220-5	4L	Glass Bottle	Calcium Chl	oride, Dihyd	rate, GR ACS	CX1055-14	4L	Glass Bottle
3X0220-3	20L	Metal Can	Meets Reagent Sp	ecifications for to	esting USP/NF monographs	CX1055-9	4L	Glass Bottle
3X0220-20	200L	Metal Drum	CX0130-1	500g	Poly Bottle	CX1055P-4	4L	Poly Coated
Benzoic Acid	d. GR ACS		CX0130-2	1kg	Poly Bottle			Glass Bottle
X0360-1	500g	Poly Bottle	CX0130-6	5kg	Poly Pail	CX1055T-4	4L	Metal Can
Benzyl Alcol		,	CX0130-20	50kg	Fiber Drum w/bag	CX1055-3	20L	Metal Can
3X0483-3	4L	Glass Bottle	Calcium Hyd	Iroxide, GR A	ACS	CX1055-20	295kg	Metal Drum
			,		esting USP/NF monographs	Citric Acid,	Anhydrous, (	GR ACS
	Crystals, GR		CX0220-1	500g	Poly Bottle			esting USP/NF monograpl
vleets Reagent Sp 3X0865-1	pecifications for te 500q	sting USP/NF monographs Poly Bottle	CX0220-5	2.5kg	Poly Bottle	CX1723-1	500g	Poly Bottle
3X0865-3	2.5kg	Poly Bottle	Calcium Nit	rate, Tetrahy	drate, GR ACS	CX1723-3	2.5kg	Poly Bottle
3X0865-5	12kg	Poly Pail	Meets Reagent Sp	ecifications for to	esting USP/NF monographs	CX1723-7	12kg	Poly Pail
		Tory ran	CX0255-1	500g	Poly Bottle	CX1723-20	45kg	Fiber Drum w/bag
Bromine, GF	RACS		CX0255-5	2.5kg	Poly Bottle	Citric Acid,	Monohydrat	e, Granular, GR AG
		sting USP/NF monographs	CX0255-20	50kg	Fiber Drum w/bag	CX1725-1	500g	Poly Bottle
X0965-6	300mL	Glass Bottle	Calcium Sul	fate. Dihvdra	ate. GR ACS	CX1725-3	2.5kg	Poly Bottle
3X0965-1	150mL	Glass Bottle				CX1725-5	12kg	Poly Pail
Bromopheno	ol Blue, Sodii	ım Salt, GR ACS	CX0298-1	100g	esting USP/NF monographs Poly Bottle	CX1725-20	50kg	Fiber Drum w/bag
3X1415-7	25g	Glass Bottle	CX0298-3	500g	Poly Bottle	Citric Acid,	Monohydrat	e, Powder, GR ACS
2-Butanone	, GR ACS		CX0298-20	50kg	Fiber Drum w/bag	CX1727-1	500g	Poly Bottle
3X1670-3	4L	Glass Bottle	Carbon Disu	lfide. GR AC	S	Cobalt(II) CI	oloride. Hexa	ahydrate, GR ACS
3X1670-5	20L	Metal Can						
3X1670-30	200L	Metal Drum	CX0395-6	ecifications for to 500mL	esting USP/NF monographs Poly Coated	CX1800-3	ecifications for to 125q	esting USP/NF monograp Glass Bottle
Butyl Aceta	te, GR ACS				Glass Bottle	CX1800-4	500g	Poly Bottle
Meets Respent Sr	pecifications for te	sting USP/NF monographs	CX0395-5	2.5L	Poly Coated	CX1800-5	2.5kg	Glass Bottle
3X1735-1	500mL	Glass Bottle			Glass Bottle			hydrate, GR ACS
3X1735-5	4L	Glass Bottle	CX0395-3	20L	Metal Can			•
3X1735-6	4L	Poly Coated	Ceric Ammo	nium Nitrat	e, GR ACS	Meets Reagent Sp CX1810-6	pecifications for to 250q	esting USP/NF monograpl Poly Bottle
		Glass Bottle		ecifications for to	esting USP/NF monographs			•
3X1735-7	20L	Metal Can	CX0595-3	500g	Glass Bottle	Copper, Fine		
Butyl Alcoh	ol, GR ACS		Chlorobenze	ne, GR ACS		CX1925-2	250g	Poly Bottle
Vleets Reagent Sp	ecifications for te	sting USP/NF monographs	CX0855-6	1kg	Glass Bottle	Cupferron, 0	GR ACS	
3X1780-11	100mL	Glass Bottle	CX0855-3	4kg	Glass Bottle	CX2120-2	125g	Poly Bottle
3X1780-6	500mL	Glass Bottle	CX0855P-1	4kg	Poly Coated	CX2120-1	500g	Poly Bottle
3X1780-5	4L	Glass Bottle			Glass Bottle	<b>Cupric Chlor</b>	ride, Dihydra	ite, GR ACS
X1780-3	20L	Metal Can	CX0855-5	20L	Metal Can	CX2150-1	500g	Poly Bottle
X1780-20	200L	Metal Drum	CX0855-30	500LB	Metal Drum	CX2150-5	2.5kg	Poly Bottle
Calcium Ace	tate, Monoh	ydrate, GR ACS						drate, Fine Crystal
CX0091-1	500g	Glass Bottle				GR ACS	ice, i circarry	and control of your
	bonate, GR A						posifications for t	octing LISD/NE management
						CX2185-1	500g	esting USP/NF monograp Poly Bottle
CX0110-1	500g	Glass Bottle				CX2185-5	2.5kg	Poly Bottle
CX0110-5	2.5kg	Poly Pail				CX2185-7	12kg	Poly Pail
CX0110-20	50kg	Fiber Drum w/bag						, .

Meets Reagent Spec CX2290-7	500mL	esting USP/NF monographs Glass Bottle
CX2290-1	1L	Glass Bottle
CX2290-3	4L	Glass Bottle
CX2290-5	20L	Metal Can
CX2290-30	200L	Metal Drum
Cyclohexanor	ne, GR ACS	
CX2335-1	4L	Glass Bottle
CX2335-5	20L	Metal Can
CX2335-20	200L	Metal Drum
Dextrose, Ani	nydrous, GF	RACS
Meets Reagent Spec DX0145-11	cifications for to	esting USP/NF monographs Poly Bottle
DX0145-1	500g	Poly Bottle
DX0145-3	2.5kg	Poly Bottle
DX0145-5	12kg	Poly Pail
DX0145-20	45kg	Fiber Drum w/bag
1,2-Dichloro	ethane, GR	ACS
Meets Reagent Spec DX0800-2	cifications for to 500mL	esting USP/NF monographs Glass Bottle
DX0800-3	4L	Glass Bottle
DX0800-5	20L	Metal Can
DX0800-NP20	20L	NOWPak®
DX0800-30	200L	Metal Drum
Dichlorometh	ane, GR AC	cs .
Meets Reagent Spec DX0835-6	cifications for to 500mL	esting USP/NF monographs Glass Bottle
DX0835-9	1L	Metal Can
DX0835-8	1L	Glass Bottle
DX0835-14	4L	Glass Bottle
DX0835-3	4L	Glass Bottle
DX0835P-4	4L	Poly Coated Glass Bottle
DX0835-5	20L	Metal Can
DX0835-20	200L	Metal Drum

500mL	Glass Bottle
4L	Metal Can
20L	Metal Can
cy-2,7-Nap Salt, GR AC	thalenedisulfonic
25g	Glass Bottle
minobenzal	dehyde, GR ACS
ecifications for to 100g	esting USP/NF monograp Poly Bottle
/lformamide	e, GR ACS
ecifications for to 500mL	esting USP/NF monograp Glass Bottle
4L	Glass Bottle
20L	Metal Can
200L	Metal Drum
ir acs	
ecifications for to	esting USP/NF monograp Glass Bottle
500mL	Glass Bottle
1L	Metal Can
4L	Glass Bottle
20L	Phenolic Lined Pail
207L	Metal Drum
S	
500g	Poly Bottle
12kg	Poly Pail
45kg	Fiber Drum w/bag
um Salt, Dil	nydrate, GR ACS
	esting USP/NF monograp
125g	Poly Bottle
125g 500g	Poly Bottle
	4L 20L xy-2,7-Nap Salt, GR AC 25g minobenzal cifications for to 100g //formamide cifications for to 500mL 4L 20L 200L SR ACS cifications for to 150mL 1L 4L 20L 207L S 500g 12kg 45kg um Salt, Dil

EX0100-5	100g	Glass Bottle
Ethyl Aceta	te, GR ACS	
Meets Reagent Sp EX0240-11	pecifications for tes 100mL	ting USP/NF monographs Glass Bottle
EX0240-13	500mL	Glass Bottle
EX0240-6	500mL	Glass Bottle
EX0240-9	1L	Poly Bottle
EX0240-14	4L	Glass Bottle
EX0240-5	4L	Glass Bottle
EX0240P-4	4L	Poly Coated Glass Bottle
EX0240-3	20L	Metal Can
EX0240-20	200L	Metal Drum
Ethyl Alcoho	ol, 200 Proof	
EX0276-1	3000mL	Glass Bottle
EX0276-4	6L	Glass Bottle
EX0276-3	16L	Glass Bottle
EX0276-20	200L	Metal Drum
Ethyl Ether,	GR ACS	
Meets Reagent Sp EX0185-8	pecifications for tes 500mL	ting USP/NF monographs Metal Can
EX0185-6	1L	Metal Can
EX0185-9	1L	Glass Bottle
EX0185-3	4L	Metal Can
EX0185-4	4L	Glass Bottle
EX0185-5	20L	Metal Can
EX0185-20	200L	Metal Drum
Ethyl Ether,	Anhydrous, G	iR ACS
Meets Reagent Sp EX0190-8	pecifications for tes 500mL	ting USP/NF monographs Metal Can
EX0190-9	1L	Glass Bottle
EX0190-6	1L	Metal Can
EX0190-4	4L	Glass Bottle

# Optifix® HF Dispenser for Hydrofluoric Acid

Sapphire ball valves and PTFE valve fittings create an inert system. The unit is not autoclavable.

Optifix® Safety Dispenser for fuming acids, brominated compounds and strong smelling reagents

The piston is glass sheathed in thick PTFE. Additional lipseal prevents fumes from escaping. The unit is not autoclavable.

Specs						
Volume (mL)	0.4-2	2-10	6-30	10-50		
Graduation (mL)	0.1	0.2	0.5	1.0		
Accuracy (%)	0.7	0.5	0.5	0.5		
Precision (%)	0.2	0.1	0.1	0.1		
Pumps (Item No.)	Pumps (Item No.)					
HF Acid Dispenser	n/a	10110638-1	10110644-1	n/a		
Safety Dispenser	10110727-1	10110738-1	n/a	10110748-1		

EX0190-5

EX0190-20

20L

200L

Metal Can

Metal Drum

Ferric Amm	onium Sulfat	ce, Dodecahydrate,	Formic Acid	, 98%, GR A	CS	Hydroxylam	ine Hydrochlo	oride, GR ACS
GR ACS  Meets Reagent Sp	pecifications for te	esting USP/NF monographs	Meets Reagent Sp FX0440-5	pecifications for te 500mL	sting USP/NF monographs Poly Bottle	Meets Reagent Sp HX0770-2	pecifications for tes 100g	ting USP/NF monograp Poly Bottle
X0205-1	500g	Poly Bottle	FX0440-7	1L	Poly Bottle	HX0770-1	500g	Poly Bottle
X0205-3	2.5kg	Poly Bottle	FX0440-6	2.5L	Poly Bottle	HX0770-6	1kg	Poly Bottle
X0205-5	12kg	Poly Pail	FX0440-21	25L	Metal Drum w/bag	HX0770-20	25kg	Metal Drum
X0205-20	50kg	Fiber Drum w/bag	Glycerol, GR	ACS		Hydroxynap	hthol Blue, G	R ACS
	•	rate, GR ACS	Meets Reagent Sp GX0185-11	pecifications for te	sting USP/NF monographs Glass Bottle	Meets Reagent Sp HX0848-1	pecifications for tes 25q	ting USP/NF monogra Glass Bottle
X0210-1	500g	Glass Bottle	GX0185-6	500mL	Glass Bottle	HX0848-3	100g	Glass Bottle
X0210-5	2.5kg	Glass Bottle	GX0185-2	1L	Glass Bottle	Imidazole, G	IR ACS	
X0210-20	25kg	Fiber Drum w/bag	GX0185-5	4L	Glass Bottle			
erric Nitra	te, Nonahydr	ate. GR ACS	GX0185-3	20L	Metal Can	Meets Reagent Sp IX0005-2	pecifications for tes 50q	ting USP/NF monogra Poly Bottle
	,		GX0185-20	259kg	Metal Drum	IX0005-1	500g	Poly Bottle
X0225-1	500g	esting USP/NF monographs Poly Bottle	GX0185-30	200L	Metal Drum	2.2'-Iminod	iethanol, GR	· · · · · · · · · · · · · · · · · · ·
X0225-4	1kg	Poly Bottle	Glycine, GR	ACS		IX0025-2	500mL	Glass Bottle
Ferric Sulfa	te, Hydrate, (	GR	GX0205-1	1kg	Glass Bottle	Iodine, GR A		
X0235-1	500g	Poly Bottle	n-Hexane. 9	5%, GR ACS				
X0235-3	2.5kg	Poly Pail	HX0302-6	500mL	Glass Bottle	Meets Reagent Sp IX0120-3	pecifications for tes 125g	ting USP/NF monogra Glass Bottle
X0235-7	12kg	Poly Pail	HX0302-3	4L	Glass Bottle	IX0120-1	500g	Glass Bottle
errous Am	monium Sulf	ate, Hexahydrate,	HX0302P-4	4L	Poly Coated	IX0120-7	12kg	Poly Pail
GR ACS		, ,		· <del>-</del>	Glass Bottle	iso-Amyl Al	cohol, GR AC	,
leets Reagent Si	pecifications for te	esting USP/NF monographs	HX0302-5	20L	Metal Can	AX1440-6	500mL	Glass Bottle
X0245-1	500g	Poly Bottle	HX0302-20	200L	Metal Drum	AX1440-3	4L	Glass Bottle
X0245-5	2.5kg	Poly Bottle	Hexanes 98.	5%, ACS				
X0245-7	12kg	Poly Pail	HX0299-6	500mL	Glass Bottle	•	cohol, GR AC	
X0245-20	50kg	Fiber Drum w/bag	HX0299-2	1L	Glass Bottle	BX1791-1	500mL	Glass Bottle
errous Sulf	fate, Heptahy	drate, GR ACS	HX0299-5	4L	Glass Bottle	BX1791-5	4L	Glass Bottle
Meets Reagent Sp X0260-1	pecifications for te	esting USP/NF monographs Poly Bottle	HX0299P-4	4L	Poly Coated Glass Bottle	iso-Propyl A	200L Alcohol, GR A	Metal Drum
X0260-7	12kg	Poly Pail	HX0299T-4	4L	Metal Can	PX1835-11	100mL	Glass Bottle
X0260-20	50kg	Fiber Drum w/bag	HX0299-3	20L	Metal Can	PX1835-13	500mL	Glass Bottle
			HX0299-20	200L	Metal Drum	PX1835-6	500mL	Glass Bottle
-ormaideny	de Solution,	dr ACS	Hydrobromi	c Acid, 48%,	GR ACS	PX1835-9	1L	Poly Bottle
leets Reagent S <sub>l</sub> K0410-13	pecifications for te 450mL	esting USP/NF monographs Poly Bottle	HX0600-3	2.5kg	Glass Bottle	PX1835-2	1L	Glass Bottle
X0410-13	450mL	Poly Bottle	Hydrochloric	c Acid, GR A	CS	PX1835-5	4L	Glass Bottle
X0410-3 X0410-1	3.78L	Poly Bottle	Meets Reagent Sr	pecifications for te	sting USP/NF monographs	PX1835-14	4L	Glass Bottle
X0410-1 X0410-3	18.9L	Metal Drum w/bag	HX0603-4	500mL	Glass Bottle	PX1835P-4	4L	Poly Coated
X0410-3 X0410-20	216kg	Metal Drum w/bag	HX0603P-5	500mL	Poly Coated			Glass Bottle
		Wictar Drum Wyoug			Glass Bottle	PX1835T-4	4L	Metal Can
ormamide,			HX0603-3	2.5L	Glass Bottle	PX1835-3	20L	Metal Can
<mark>leets Reagent S</mark> X0420-8	pecifications for te 500g	esting USP/NF monographs Glass Bottle	HX0603-75	2.5L	Poly Coated Glass Bottle	PX1835-20	200L	Metal Drum
X0420-6	1kg	Glass Bottle	HX0603-23	227kg	Poly Drum		ther, GR ACS	
X0420-4	2.5L	Glass Bottle	Hydrofluorio	c Acid, 48%,	GR ACS	PX1890-7	4L	Glass Bottle
Formic Acid	, 88%, GR A	CS	Meets Reagent Sp	ecifications for te	sting USP/NF monographs	PX1890-20	200L	Metal Drum
Лeets Reagent S	pecifications for te	esting USP/NF monographs	HX0621-2	500mL	Poly Bottle			
FX0445-6	2.5L	Poly Bottle	HX0621-3	1L	Poly Bottle			

LX0020-6	500mL	Glass Bottle						
LX0020-6 LX0020-3	4L	Glass Bottle	Meets Reagent Spo MX0335-2	ecifications for to 250g	esting USP/NF monographs Poly Bottle	Meets Reagent Sp NX0350-1	ecifications for te 500g	sting USP/NF monograph Poly Bottle
Lactose, Mo	nohvdrate. G	iR ACS	Methanol, G	R ACS		NX0350-4	1kg	Poly Bottle
•	, .		Mosts Paggant Sp	oifications for t	esting USP/NF monographs	NX0350-20	50kg	Fiber Drum w/bag
LX0035-1	500g	sting USP/NF monographs Poly Bottle	MX0485-11	100mL	Glass Bottle	Nitric Acid,	GR ACS	
LX0035-7	12kg	Poly Pail	MX0485-13	500mL	Glass Bottle	Meets Reagent Sp	ecifications for te	sting USP/NF monograph:
LX0035-20	45kg	Fiber Drum w/bag	MX0485-6	500mL	Glass Bottle	NX0409-4	500mL	Glass Bottle
Lead Acetate	e, Trihydrate	, GR ACS	MX0485-9	1L	Poly Bottle	NX0409P-5	500mL	Poly Coated Glass Bottle
Meets Reagent Sp	ecifications for te	sting USP/NF monographs	MX0485-8	1L	Glass Bottle	NX0409-2	2.5L	Glass Bottle
LX0120-11	100g	Poly Bottle	MX0485-14	4L	Glass Bottle	NX0409-75	2.5L 2.5L	Poly Coated
LX0120-1	500g	Poly Bottle	MX0485-3	4L	Poly Bottle	1470403-73	Z.JL	Glass Bottle
LX0120-30	50kg	Fiber Drum w/bag	MX0485-7	4L	Glass Bottle	Nitrobenzen	e. GR ACS	
Lead Nitrate	, GR ACS		MX0485P-4	4L	Poly Coated Glass Bottle			sting USP/NF monograph:
		sting USP/NF monographs	MX0485-5	20L	Metal Can	NX0518-1	500mL	Glass Bottle
LX0159-11	100g	Poly Bottle	MX0485-20	200L	Metal Drum	NX0518-5	4L	Glass Bottle
LX0159-1	500g	Poly Bottle	Methanol, A	nhydrous, G	R ACS	Nitrometha	ne, GR ACS	
LX0159-20	50kg	Fiber Drum w/bag		,	esting USP/NF monographs,	NX0615-1	500mL	Glass Bottle
Lithium Carb	onate, GR A	ics	Laboratory	curcations for t	Sung OSF/M Monographs,	Oxalic Acid,	Dihydrate, G	R ACS
LX0325-1	500g	Poly Bottle	MX0487-6	500mL	Glass Bottle	Meets Reagent Sr	ecifications for te	sting USP/NF monograph:
LX0325-20	50kg	Poly Drum	MX0487-5	4L	Glass Bottle	0X0270-1	500g	Poly Bottle
Lithium Chlo	ride, GR AC	S	MX0487-3	20L	Metal Can	0X0270-5	12kg	Poly Pail
LX0331-1	500g	Poly Bottle	MX0487-20	200L	Metal Drum	Perchloric A	cid, 60%, GF	RACS
LX0331-3	2.5kg	Poly Bottle	2-Methoxye	thanol, GR	ACS	Meets Reagent Sr	ecifications for te	sting USP/NF monograph:
LX0331-20	50kg	Fiber Drum w/bag	MX0515-6	500mL	38/430 Glass Bottle	PX0396D-4	2.5L	Glass Bottle
Lithium Hyd	roxide, Mon	ohydrate, GR ACS	MX0515-1	3kg	38/430 Glass Bottle	Perchloric A	cid, 70%, GF	RACS
LX0350-1	500g	Poly Bottle	MX0515-30	55GA	Metal Drum	Meets Reagent Sr	ecifications for te	sting USP/NF monograph:
LX0350-5	2.5kg	Poly Bottle	4-Methyl-2-	-Pentanone	, GR ACS	PX0396A-13	1L	Glass Bottle
Magnesium	Chloride, He	xahydrate, GR ACS	Meets Reagent Spe	ecifications for t	esting USP/NF monographs	PX0396A-7	2.5L	Glass Bottle
Meets Reagent Sn	ecifications for te	sting USP/NF monographs	MX1300-3	4L	Glass Bottle	Petroleum E	ther, GR ACS	3
MX0045-2	250g	Poly Bottle	MX1300-5	20L	Metal Can	PX0425-6	500mL	Glass Bottle
MX0045-1	500g	Poly Bottle	MX1300-30	207L	Metal Drum	PX0425-2	1L	Glass Bottle
MX0045-4	1kg	Poly Bottle	1-Methyl-2-	-Pyrrolidon	e, GR ACS	PX0425-5	4L	Glass Bottle
MX0045-20	50kg	Fiber Drum w/bag	MX1395-5	20L	Metal Can	PX0425P-4	4L	Poly Coated
Magnesium	Nitrate, Hex	ahydrate, GR ACS	MX1395-30	203L	Metal Drum			Glass Bottle
Meets Reagent Sp	ecifications for te	sting USP/NF monographs	Methylsulfox	cide, GR AC	S	PX0425T-4	4L	Metal Can
MX0060-1	500g	Poly Bottle	Meets Reagent Sne	ecifications for t	esting USP/NF monographs	PX0425-3	20L	Metal Can
MX0060-20	50kg	Fiber Box w/bag	MX1458-6	500mL	Glass Bottle	PX0425-20	200L	Metal Drum
Magnesium :	Sulfate, Hep	tahydrate, GR ACS	MX1458-3	1L	Glass Bottle	Phenol, GR /	ACS	
Meets Reagent Sp	ecifications for te	sting USP/NF monographs	MX1458-5	4L	Glass Bottle	Meets Reagent Sp PX0510-1	ecifications for te 500g	sting USP/NF monograph Glass Bottle
MX0070-1	500g	Poly Bottle	MX1458-7	18.9L	Poly Pail	PX0510-1		Glass Bottle
MX0070-3	2.5kg	Poly Bottle	MX1458-56	56L	Poly Drum		1kg	
MX0070-5	12kg	Poly Pail	MX1458-30	200L	Poly Drum	rnenoiphtha	alein, GR, AC	3
MX0070-20	50kg	Fiber Drum w/bag	Methyl-t-Bu	tyl Ether, G	R ACS	PX0520-2	500g	Glass Bottle
Manganous	Sulfate, Mo	nohydrate, GR ACS	MX0819-1	500mL	Glass Bottle		J	
MX0210-1	500g	Poly Bottle	MX0819-5	20L	Metal Can			
	FOL	F:h = D	MV0010 00	2001	Matali			
MX0210-30	50kg	Fiber Drum w/bag	MX0819-30	200L	Metal Drum			

MX0214-3

MX0214-1

MX0214-30

500g

3kg

25kg

Poly Bottle

Poly Pail

Fiber Drum w/bag

#### o-Phosphoric Acid, 85% W/W, GR ACS

Meets Reagent Sp PX0995-6	pecifications for tes 500mL	ting USP/NF monographs Glass Bottle
PX0995P-5	500mL	Poly Coated Glass Bottle
PX0995-4000	4L	Poly Bottle
PX0995-3	2.5L	Glass Bottle
PX0995P-1	2.5L	Poly Coated Glass Bottle
PX0995-78	20L	
PX0995-20	318kg	Poly Drum

#### Phosphoric Acid, Meta, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1004-1
 500g
 Poly Bottle

 PX1004-5
 2.5kg
 Poly Bottle

#### Phosphorus Pentoxide, GR ACS

Meets Reagent Specifications for testing USP/NF monographs PX1040-1 500g Glass Bottle

#### Phthalic, Anhydride, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1068-1
 500g
 Poly Bottle

 PX1068-7
 12kg
 Poly Pail

#### Potassium Acetate, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs PX1330-1

 500g
 Poly Bottle

 PX1330-3
 2kg
 Poly Bottle

 PX1330-7
 12kg
 Poly Pail

 PX1330-30
 45kg
 Fiber Drum w/bag

#### Potassium Bicarbonate, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs PX1345-1

 PX1345-1
 500g
 Poly Bottle

 PX1345-30
 50kg
 Fiber Box w/bag

#### Potassium Bromide, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1380-1
 500g
 Poly Bottle

 PX1380-5
 2.5kg
 Poly Bottle

 PX1380-7
 12kg
 Poly Pail

 PX1380-20
 50kg
 Fiber Drum w/bag

## Potassium Carbonate, Anhydrous, Granular, GR ACS

Meets Reagent Specifications for testing USP/NF monographs				
PX1390-1	500g	Poly Bottle		
PX1390-5	2.5kg	Poly Bottle		
PX1390-20	50kg	Fiber Box w/bag		

#### Potassium Chlorate, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs PX1395-1

 500g
 Glass Bottle

 PX1395-7
 12kg
 Poly Pail

#### Potassium Chloride, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1405-1
 500g
 Poly Bottle

 PX1405-5
 2.5kg
 Poly Bottle

 PX1405-7
 12kg
 Poly Pail

 PX1405-20
 50kg
 Fiber Drum w/bag

#### Potassium Cyanide, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1435-1
 500g
 Poly Bottle

 PX1435-5
 2.5kg
 Poly Bottle

 PX1435-20
 50kg
 Fiber Drum w/bag

#### Potassium Dichromate, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1445-11
 100g
 Poly Bottle

 PX1445-1
 500g
 Poly Bottle

 PX1445-2
 1kg
 Poly Bottle

 PX1445-20
 50kg
 Fiber Drum w/bag

#### Potassium Ferricyanide, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1455-2
 250g
 Poly Bottle

 PX1455-1
 500g
 Poly Bottle

 PX1455-4
 1kg
 Poly Bottle

 PX1455-20
 50kg
 Fiber Drum w/bag

#### Potassium Ferrocyanide, Trihydrate, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1460-1
 500g
 Poly Bottle

 PX1460-20
 50kg
 Fiber Drum w/bag

#### Potassium Fluoride, GR ACS

 Meets Reagent Specifications for testing USP/NF monographs

 PX1467-4
 1kg
 Poly Bottle

 PX1467-7
 12kg
 Poly Pail

 PX1467-30
 50kg
 Fiber Box w/bag

# PX1476-3 125g Poly Bottle

PX1476-3	125g	Poly Bottle
PX1476-1	500g	Poly Bottle
PX1476-5	2.5kg	Poly Bottle
PX1476-7	12kg	Poly Pail

#### Potassium Hydroxide, Pellets, GR ACS

Meets Reagent Specifications for testing USP/NF monographs				
PX1480-11	100g	Poly Bottle		
PX1480-1	500g	Poly Bottle		
PX1480-13	500g	Poly Bottle		
PX1480-14	2.5kg	Poly Bottle		
PX1480-5	2.5kg	Poly Bottle		
PX1480-9	12kg	Poly Pail		
PX1480-30	45ka	Fiher Drum w/hag		

#### Potassium Iodide, Crystals, GR ACS

Meets Reagent Specifications for testing USP/NF mor PX1505-3 125g Poly Bott		
PX1505-1	500g	Poly Bottle
PX1505-5	2.5kg	Poly Bottle
PX1505-7	12kg	Poly Pail
PX1505-30	50kg	Fiber Drum w/bag

Potassium Iodide, Granular, GR ACS			
PX1507-3	125g	Poly Bottle	
PX1507-1	500g	Poly Bottle	
PX1507-5	2.5kg	Poly Bottle	
PX1507-7	12kg	Poly Pail	
PX1507-30	45kg	Fiber Drum w/bag	

Kit	Item No.
SpillSolv® Multi-Purpose Kit Acid, Caustic & Solvent Spills	SX1300-1
SpillSolv® Acid Spill Kit	SX1310-1
SpillSolv® Caustic Spill Kit	SX1320-1
SpillSolv® Solvent Spill Kit	SX1330-1
SpillSolv® Formaldehyde Spill Kit	SX1340-1
SpillSolv® Mercury Spill Kit	SX1350-1



EMD Chemicals offers the next generation in spill cleanup technology. SpillSolv® Chemical Treatment Kits are available in six different types: Multi-Purpose, Acid, Caustic, Solvent, Formaldehyde, and Mercury. Replacement neutralizers, bulk sizes, and safety accessories are also available. Please visit www.SpillSolv.com for more information.

Meets Reagent Sp	ecifications for to	esting USP/NF monographs
PX1520-1	500g	Poly Bottle
PX1520-5	2.5kg	Poly Bottle
PX1520-7	12kg	Poly Pail
PX1520-20	50kg	Fiber Drum w/bag
Potassium O	xalate, Mon	ohydrate, GR ACS
PX1535-1	500g	Poly Bottle
PX1535-30	50kg	Fiber Drum w/bag
Potassium Po	ermanganat	e, GR ACS
Meets Reagent Sp	ecifications for to	esting USP/NF monographs
PX1550-1	500g	Poly Bottle
PX1550-5	2.5kg	Poly Bottle
PX1550-20	50kg	Fiber Drum w/bag
Potassium Pl	nosphate, Di	basic, GR ACS
Meets Reagent Sp PX1570-1	ecifications for to	esting USP/NF monographs Poly Bottle
PX1570-2	1kg	Poly Bottle
PX1570-7	12kg	Poly Pail
PX1570-20	50kg	Fiber Drum w/bag
Potassium Pl	nosphate, M	onobasic, GR ACS
Meets Reagent Sp PX1565-1	ecifications for to	esting USP/NF monographs Poly Bottle
PX1565-5	2.5kg	Poly Bottle
PX1565-7	12kg	Poly Pail
PX1565-20	50kg	Fiber Drum w/bag

Meets Reagent Sp PX1581-1	ecifications for to 500g	esting USP/NF monograph: Poly Bottle
PX1581-3	2.5kg	Poly Bottle
PX1581-20	50kg	Fiber Box w/bag
Potassium So GR ACS	odium Tartra	ate, Tetrahydrate,
Meets Reagent Sp PX1590-11	ecifications for to 100g	esting USP/NF monograph: Poly Bottle
PX1590-1	500g	Poly Bottle
PX1590-2	1kg	Poly Bottle
PX1590-5	2.5kg	Poly Bottle
PX1590-20	50kg	Fiber Drum w/bag
Potassium S	ulfate, Cryst	als, GR ACS
Meets Reagent Sp PX1595-1	ecifications for to	esting USP/NF monograph Poly Bottle
PX1595-5	2.5kg	Poly Bottle
PX1595-6	5kg	Poly Bottle
PX1595-20	50kg	Fiber Box w/bag
Potassium S	ulfate, Powd	ler, GR ACS
PX1600-1	500g	Poly Bottle

500g

50kg

500mL

4L

1,2-Propanediol, GR ACS

Poly Bottle

Fiber Drum w/bag

Glass Bottle

Glass Bottle

PX1630-1

PX1630-20

PX1692-1

PX1692-3

n-Propyl Al	cohol, GR ACS	
PX1814-1	500mL	Glass Bottle
PX1814-3	4L	Glass Bottle
PX1814-5	20L	Metal Can
PX1814-20	200L	Metal Drum
Pyridine, GF	RACS	
Meets Reagent S	pecifications for test	ting USP/NF monographs
PX2020-11	100mL	Glass Bottle
PX2020-6	500mL	Glass Bottle
PX2020-3	2.5L	Glass Bottle
PX2020-5	4L	Glass Bottle
PX2020-20	200L	Metal Drum
Pyrogallol, 0	GR ACS	
Meets Reagent Sp PX2075-2	pecifications for test 250g	ting USP/NF monographs Glass Bottle
PX2075-1	500g	Glass Bottle
Salicylic Ac	id, GR ACS	
SX0060-1	500g	Glass Bottle
Silver Sulfa	te, GR ACS	
SX0210-2	25g	Poly Bottle
SX0210-4	100g	Poly Bottle
SX0210-6	500g	Poly Bottle

Every laboratory needs to make accurate and reproducible pH measurements. A minor unexpected change in pH can interfere with an analytical assay, a critical step in a testing process, or even the function or efficacy of an end product. It is important to use a pH system that you trust absolutely. colorpHast® strips from EMD Chemicals can be trusted in any application or environment. They are manufactured under ISO 9001 quality standards to provide you with the consistency, accuracy and reliability that you need in your important scientific work. Visit www.colorphast.com for additional product information.

Kit	colorpHast® Type	pH Range	Sensitivity pH Units
	Universal		
9590-3 (6-pack)	Four squares with different indicators on each strip	0 - 14.0	0.5
	Intermediate Range		
9578-3 (6-pack)	Three squares with different indicators on each strip	2.0 - 9.0	0.5
9586-3 (6-pack)		0.0 - 6.0	0.3 - 0.5
9588-3 (6-pack)		5.0 - 10.0	0.3 - 0.5
9587-3 (6-pack)		7.5 – 14.0	0.3 - 0.5
	Narrow Range		
9580-3 (6-pack)	One rectangle with a single indicator on each strip	0 - 2.5	0 .2- 0.3
9581-3 (6-pack)		2.5 – 4.5	0.2 - 0.3
9582-3 (6-pack)		4.0 – 7.0	0.2 - 0.3
9583-3 (6-pack)		6.5 – 10.0	0.2 - 0.3
9585-3 (6-pack)		11.0 – 13.0	0.2 - 0.3
ColorpHast® Store		Includes One Pack:	Includes Two Packs:
700181-2	13 packs of 100 pH strips each, covering pH ranges listed	0 - 2.5	0 - 6.0
		2.5 – 4.5	5.0 - 10.0
<u> </u>		4.0 – 7.0	7.5 – 14.0
		6.5 – 10.0	0 - 14.0
		11.0 – 13.0	

Sodium Ace	tate, Anhydr	ous, GR ACS	Sodium Citr	ate, Dihydra	te, Crystals, GR ACS	Sodium Oxa	late, GR ACS	5
2 1		esting USP/NF monographs	SX0445-1	500g	Poly Bottle			esting USP/NF monograph:
SX0265-1	500g	Poly Bottle	SX0445-3	2.5kg	Poly Bottle	SX0685-2	250g	Poly Bottle
SX0265-3	2.5kg	Poly Bottle	SX0445-5	12kg	Poly Pail	SX0685-1	500g	Poly Bottle
SX0265-5	12kg	Poly Pail	SX0445-20	50kg	Fiber Drum w/bag	SX0685-4	1kg	Poly Bottle
SX0265-20	45kg	Fiber Drum w/bag	Sodium Fluo	oride, GR AC	S	SX0685-5	2.5kg	Poly Bottle
Sodium Acet	ate, Trihydra	ate, GR, ACS	Meets Reagent Sp	ecifications for to	esting USP/NF monographs	SX0685-7	12kg	Poly Pail
SX0255-1	500g	Poly Bottle	SX0550-1	500g	Poly Bottle	SX0685-20	50kg	Fiber Drum w/bag
SX0255-3	2.5kg	Poly Bottle	SX0550-5	2.5kg	Poly Bottle	Sodium Pero	chlorate Moi	nohydrate, GR ACS
SX0255-5	12kg	Poly Pail	SX0550-20	50kg	Fiber Drum w/bag	SX0694-1	500g	Poly Bottle
SX0255-20	50kg	Fiber Box w/bag	Sodium Hyd	roxide, Pelle	ts, GR ACS	SX0694-5	2.5kg	Poly Bottle
Sodium Ace	tate, Trihydr	ate HPLC	Meets Reagent Sp	ecifications for to	esting USP/NF monographs	SX0694-7	12kg	Poly Pail
SX0256-5	500g	Poly Bottle	SX0590-1	500g	Poly Bottle	SX0694-20	50kg	Fiber Drum w/bag
Sodium Bica	rbonate. GR	ACS	SX0590-3	2.5kg	Poly Bottle	Sodium Pero	chlorate, Anl	nydrous, GR ACS
			SX0590-7	12kg	Poly Pail	Meets Reagent Sr	necifications for t	esting USP/NF monographs
SX0320-1	500g	esting USP/NF monographs Poly Bottle	SX0590-30	35kg	Poly Pail	SX0692-3	500g	Poly Bottle
SX0320-3	2.5kg	Poly Bottle	SX0590-20	50kg	Fiber Box w/bag	SX0692-1	1kg	Poly Bottle
SX0320-5	12kg	Poly Pail	Sodium Hyd	roxide, Pelle	ts Low in	Sodium Pero	oxide, Granu	lar, GR ACS
SX0320-30	45kg	Fiber Drum w/bag	Carbonate,			Moote Paggant St	ensifications for t	esting USP/NF monographs
Sodium Bica			SX0593-1	500g	Poly Bottle	SX0700-5	250g	Metal Can
SX0322-5	500g	Poly Bottle	SX0593-3	2.5kg	Poly Bottle	SX0700-6	1kg	Poly Bottle
		,	SX0593-20	50kg	Fiber Drum w/bag	Sodium Pho	sphate. Diba	sic, Anhydrous,
Sodium Bora	ate, Decanyo	rate, GR ACS	Sodium Iodi	de. GR ACS		GR ACS		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		esting USP/NF monographs	SX0625-1	500g	Poly Bottle	Meets Reagent Sr	necifications for t	esting USP/NF monographs
SX0355-1	500g	Poly Bottle	SX0625-20	50kg	Poly Pail	SX0720-1	500g	Poly Bottle
SX0355-5	12kg	Poly Pail			· · · · · · · · · · · · · · · · · · ·	SX0720-5	2.5kg	Poly Bottle
SX0355-20	50kg	Fiber Drum w/bag	Sodium met	a-renouate,	, un Acs	SX0720-7	12kg	Poly Pail
Sodium Bron			Meets Reagent Sp SX0695-5	pecifications for to 125q	esting USP/NF monographs Glass Bottle	SX0720-20	50kg	Fiber Drum w/bag
SX0390-1	500g	Poly Bottle	SX0695-1	500g	Glass Bottle	Sodium Pho	sphate, Diba	sic, Heptahydrate,
SX0390-30	50kg	Fiber Drum w/bag				GR ACS	•	
	onate, Anh	ydrous, Granular,	Sodium ivioi	yodate, Diny	drate, GR ACS	Meets Reagent Sr	pecifications for t	esting USP/NF monographs
GR ACS			Meets Reagent Sp SX0650-2	pecifications for to 250g	esting USP/NF monographs Poly Bottle	SX0715-1	500g	Poly Bottle
SX0400-1	500g	Poly Bottle	SX0650-4	230g 1kg	Poly Bottle	SX0715-3	2.5kg	Poly Bottle
SX0400-3	2.5kg	Poly Bottle	SX0650-7	12kg	Poly Pail	SX0715-7	12kg	Poly Pail
SX0400-5	12kg	Poly Pail	SX0650-20	50kg	Fiber Drum w/bag	SX0715-20	50kg	Fiber Drum w/bag
SX0400-30	50kg	Fiber Drum w/bag				Sodium Pho	sphate, Diba	sic, Heptahydrate,
Sodium Carl	onate, Anh	ydrous, Powder,	Sodium Nitr	ate, GR ACS		HPLC		
GR ACS					esting USP/NF monographs	SX0723-5	500g	Poly Bottle
Meets Reagent Sp	ecifications for to	esting USP/NF monographs	SX0655-1	500g	Poly Bottle	Sodium Pho	sphate. Mon	obasic.
SX0395-1	500g	Poly Bottle	SX0655-3	2.5kg	Poly Bottle	Monohydra	•	•
SX0395-3	2.5kg	Poly Bottle	SX0655-20	50kg	Fiber Drum w/bag	Meets Reagent Sr	necifications for t	esting USP/NF monographs
SX0395-5	12kg	Poly Pail	Sodium Nitr	ite, GR ACS		SX0710-1	500g	Poly Bottle
SX0395-20	50kg	Fiber Drum w/bag			esting USP/NF monographs	SX0710-3	2.5kg	Poly Bottle
Sodium Chlo	oride, GR AC	S	SX0665-1	500g	Poly Bottle	SX0710-5	12kg	Poly Pail
Meets Reagent Sp	ecifications for to	esting USP/NF monographs	SX0665-7	12kg	Poly Pail	SX0710-20	50kg	Fiber Drum w/bag
SX0420-1	500g	Poly Bottle	SX0665-20	50kg	Fiber Drum w/bag	Sodium Pho	sphate, Mon	obasic,
SX0420-13	500g	Glass Bottle		oferricyanid	e, Dihydrate,	Monohydra	•	
SX0420-3	2.5kg	Poly Bottle	GR ACS			SX0709-5	500g	Poly Bottle
SX0420-5	12kg	Poly Pail			esting USP/NF monographs			
SX0420-22	50kg	Fiber Drum w/bag	SX0675-2	100g	Poly Bottle			
CV0.100.00	4 501	Eu	SX0675-1	500a	Poly Bottle			

SX0675-1

SX0420-20

159kg

Fiber Drum w/bag

500g

Poly Bottle

#### Sodium Phosphate, Tribasic, Dodecahydrate, GR ACS

Meets Reagent Sp	ecifications for to	esting USP/NF monographs
SX0725-1	500g	Poly Bottle
SX0725-3	2.5kg	Glass Bottle
SX0725-7	12kg	Poly Pail
SX0725-20	50kg	Fiber Drum w/bag

#### Sodium Pyrophosphate, Decahydrate, GR ACS

Meets Reagent Sp	ecifications for to	esting USP/NF monographs
SX0740-1	500g	Poly Bottle
SX0740-5	12kg	Poly Pail
SX0740-20	50kg	Fiber Drum w/bag

# Sodium Sulfate, Anhydrous, Granular, GR ACS

Meets Reagent Sp	ecifications for to	esting USP/NF monographs
SX0760-1	500g	Glass Bottle
SX0760-3	2.5kg	Glass Bottle
SX0760-5	12kg	Poly Pail
SX0760-20	45kg	Fiber Drum w/bag

# Sodium Sulfate, Anhydrous, Granular 10-60 Mesh, TRACEPUR®

SX0760E-1	500g	Glass Bottle
SX0760E-3	2.5kg	Glass Bottle
SX0760E-5	12kg	Poly Pail
SX0760E-20	45kg	Fiber Drum w/bag
SX0760F-20	45kg	

# Sodium Sulfate, Anhydrous, Powder, GR ACS

Meets Reagent Specifications for testing USP/NF monographs		
SX0761-1	500g	Poly Bottle
SX0761-3	2.5kg	Poly Bottle
SX0761-5	12kg	Poly Pail
SX0761-20	45kg	Fiber Drum w/bag

#### Sodium Sulfide, Nonahydrate, GR ACS

Meets Reagent Specifications for testing USP/NF monographs SX0770-1 500g Glass Bottle

#### Sodium Sulfite, Anhydrous, GR ACS

Meets Reagent Specifications for testing USP/NF monographs		
SX0785-1	500g	Poly Bottle
SX0785-3	2.5kg	Poly Bottle
SX0785-5	12kg	Poly Pail
SX0785-20	45kg	Fiber Drum w/bag

#### Sodium Tartrate, Dihydrate, GR ACS

Meets Reagent S	pecifications for testir	g USP/NF monographs
SX0795-1	500g	Poly Bottle

### Sodium Tetraphenyl Boron, GR ACS

### SX0805-3 25g Poly Bottle

#### Sodium Thiosulfate, Pentahydrate, GR ACS

Meets Reagent Specifications for testing USP/NF monographs		
SX0815-1	500g	Poly Bottle
SX0815-3	2.5kg	Poly Bottle
SX0815-5	12kg	Poly Pail
SX0815-20	50kg	Fiber Drum w/bag

#### Stannous Chloride, Dihydrate, GR ACS

Meets Reagent Specifications for testing USP/NF monograph		
SX0885-1	500g	Poly Bottle
SX0885-5	2.5kg	Poly Bottle
SX0885-7	12kg	Poly Pail
SX0885-20	25kg	Poly Pail

#### Starch, Soluble, GR ACS

Meets Reagent Sp SX0930-1	pecifications for to 500g	esting USP/NF monographs Poly Bottle
Strontium C	Chloride, Hex	ahydrate, GR ACS
SX1015-1	500g	Poly Bottle
SX1015-7	12kg	Poly Pail
SX1015-20	25kg	Fiber Drum w/bag

#### Succinic Acid, GR ACS

SX1040-3	500g Poly Bottle	
Sucrose, GR	ACS	
SX1075-1	500g	Poly Bottle
SX1075-3	2.5kg	Poly Bottle
SX1075-7	12kg	Poly Pail
SX1075-20	45kg	Fiber Drum w/bag
Sulfamic Ac	id, GR ACS	
SX1140-3	500g	Poly Bottle

Meets Reagent Specifications for testing USP/NF monographs

#### 5-Sulfosalicylic Acid, Dihydrate, GR ACS

Meets Reagent Specifications for testing USP/NF monographs SX1220-1 500g Poly Bottle

#### Sulfuric Acid, GR ACS

Meets Reagent Specifications for testing USP/NF monograp SX1244-6 500mL Glass Bottle		
SX1244PC-5	500mL	Poly Coated Glass Bottle
SX1244-7	2.5L	Poly Coated Glass Bottle
SX1244-5	2.5L	Glass Bottle
SX1244-75	2.5L	Poly Coated Glass Bottle
SX1244-8	45.4kg	Poly Carboy
SX1244-23	340kg	Poly Drum

Optifix® Basic Dispenser for aqueous solutions, light acids and crystallizing substances

The piston is glass sheathed in thick PTFE. The unit is autoclavable up to 121°C. Lifetime warranty against mechanical defects.

Optifix® Solvent Dispenser for organic solvents and materials that swell PTFE

The piston is glass. The unit is autoclavable up to 121°C. Lifetime warranty against mechanical defects.



Meets Reagent Sp TX0010-1	pecifications for te	sting USP/NF monographs Poly Bottle
TX0010-20	50kg	Fiber Box w/bag
tert-Butyl A	Alcohol, GR A	cs
BX1805-2	1L	Poly Bottle
BX1805-1	1L	Metal Can
BX1805-4	4L	Metal Can
BX1805-5 TX0280-6 TX0280-8 TX0280-7 TX0280P-1 TX0280-10 TX0280-20	20L 500mL 1L 4L 4L 18.5L 200L	Metal Can Glass Bottle Glass Bottle Glass Bottle Poly Coated Glass Bottle Metal Can Metal Drum
Toluene, GR	ACS	
Meets Reagent Sp TX0735-6	pecifications for te 500mL	sting USP/NF monographs Glass Bottle
TX0735-13	500mL	Glass Bottle
TX0735-5	4L	Glass Bottle
TX0735-14	4L	Glass Bottle
TX0735P-4	4L	Poly Coated

TX1045-1

TX1045-5

TX1045-20

500g

2.5kg

50kg

Glass Bottle

Glass Bottle

Fiber Drum w/bag

Meets Reagent Sp TX0010-1	pecifications for te 500g	sting USP/NF monographs Poly Bottle	Meets Reager TX1390-5
TX0010-20	50kg	Fiber Box w/bag	TX1390-30
tert-Butyl A	lcohol, GR A	cs	Tris(hydro
BX1805-2	1L	Poly Bottle	Meets Reager
BX1805-1	1L	Metal Can	TX1529-1
BX1805-4	4L	Metal Can	TX1529-5
BX1805-5	20L	Metal Can	TX1529-20
TX0280-6	500mL	Glass Bottle	Urea, GR
TX0280-8 TX0280-7 TX0280P-1	1L 4L 4L	Glass Bottle Glass Bottle Poly Coated Glass Bottle	Meets Reagen UX0065-1
TX0280-10	18.5L	Metal Can	UX0065-5
TX0280-20	200L	Metal Drum	UX0065-7
Toluene, GR	ACS		UX0065-20
Meets Reagent Sp	ecifications for te	sting USP/NF monographs	Xylenes,
TX0735-6	500mL	Glass Bottle	Moote Doogou
TX0735-13	500mL	Glass Bottle	Meets Reagen XX0055-11
TX0735-5	4L	Glass Bottle	XX0055-13
TX0735-14	4L	Glass Bottle	XX0055-6
TX0735P-4	4L	Poly Coated	XX0055-14
		Glass Bottle	XX0055-5
TX0735T-4	4L	Metal Can	XX0055P-4
TX0735-3	20L	Metal Can	70100001 1
TX0735-20	200L	Metal Drum	XX0055-3
Trichloroace	tic Acid, GR	ACS	XX0055-20
Meets Reagent Sp TX1045-3	pecifications for te 125g	sting USP/NF monographs Glass Bottle	

2,2,4-Trimethy	/lpentai	ne, GR ACS
Meets Reagent Specif TX1390-5	ications fo 4L	r testing USP/NF monographs Glass Bottle
TX1390-30	200L	Metal Drum
Tris(hydroxyme	ethyl)an	ninomethane, GR ACS
Meets Reagent Specif TX1529-1	ications fo 500g	r testing USP/NF monographs Poly Bottle
TX1529-5	2.5kg	Poly Bottle
TX1529-20	50kg	Fiber Drum w/bag
Urea, GR ACS		
Meets Reagent Specif UX0065-1	ications fo 500g	r testing USP/NF monographs Poly Bottle
UX0065-5	2.5kg	Poly Bottle
UX0065-7	12kg	Poly Pail
UX0065-20	45kg	Fiber Drum w/bag
Xylenes, GR AC	:S	
Meets Reagent Specif XX0055-11	ications fo 100mL	r testing USP/NF monographs Glass Bottle

500mL

500mL

4L

4L

4L

20L

200L

Glass Bottle

Glass Bottle

Glass Bottle

Glass Bottle

Poly Coated Glass Bottle

Metal Can

Metal Drum

Zinc Chlorid	e, GR ACS	
ZX0065-1	500g	Poly Bottle
ZX0065-5	2.5kg Poly Bottle	
ZX0065-20	25kg	Metal Can
Zinc Sulfate	, Heptahydr	ate, GR ACS
ZX0105-1	500g	Poly Bottle
ZX0105-20	50kg	Fiber Drum w/bag
Zinc, 20 Me	sh, GR ACS	
Meets Reagent Sp ZX0010-1	ecifications for t 500g	esting USP/NF monographs Poly Bottle
ZX0010-7	12kg	Poly Pail

Specs									
Volume (mL)	0.4-2	1-5	2-10	6-30	10-50	20-100	40-200	60-300	100-500
Graduation (mL)	0.1	0.1	0.2	0.5	1.0	2.0	5.0	5.0	5.0
Accuracy (%)	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Precision (%)	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pumps (Item No.)									
Basic Dispenser	10108027-1	10108033-1	10108038-1	10108044-1	10108048-1	10108051-1	108053-1	108056-1	10108058-
Solvent Dispenser	10108127-1	10108133-1	10108138-1	10108144-1	10108148-1	10108151-1	10108053-1	108056G-1	10108158-

EMD Chemicals' products are warranted only to conform to the specifications set forth on their label/packaging. EMD's sole responsibility under this warranty shall be limited to replacement of non-conforming product. Any change or modification of an EMD product or its prescribed procedure for use may adversely affect its stated specification and therefore EMD shall not be liable in the event of any such change or modification. All EMD products are sold on the condition that they be used and disposed of only within the scope of currently recognized critical standards related to human health and the physical environment. Price and specifications are subject to change without notice. EMD reserves the right to discontinue items without prior notice.

EXCEPT FOR THE WARRANTY STATED ABOVE, EMD MAKES NO OTHER WARRANTY OF ANY KIND WITH REGARD TO ITS PRODUCTS WHETHER EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW, OR IMPLIED BY COURSE OF DEALING, USAGE OF TRADE OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, EMD SHALL NOT IN ANY CIRCUMSTANCE BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. ALL SALES ARE SUBJECT TO EMD's TERMS & CONDITIONS OF SALE.

EM ReCycler®, Prolift®, OmniSolv® and SpillSolv® are registered trademarks of EMD Chemicals Inc.

colorpHast® is a registered trademark of Merck KGaA, Darmstadt, Germany

NowPak® is a registered trademark of Advanced Technology Materials, Inc.

Optifix® is a registered trademark of Poulten + Graf GmbH

EMD Chemicals Inc. 480 S. Democrat Road Gibbstown, NJ 08027 Phone 800-222-0342 Fax 856-423-4389 www.emdchemicals.com

LT 10005142 REV 2/10

