

# PROPRIETARY & MANUFACTURED CHEMICALS



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CHEMICALS®

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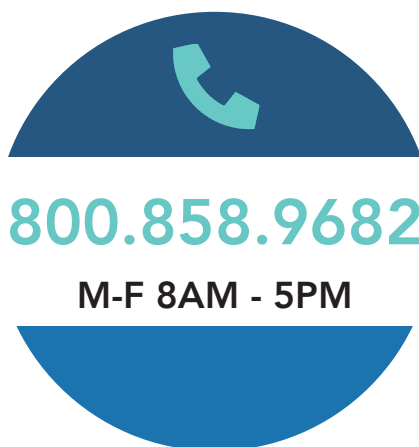


## Introduction

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GFS Chemicals is a Columbus, OH, USA based manufacturer of specialty and fine chemicals serving customers worldwide since 1928. As an ISO 9001:2015 certified manufacturer, GFS' capability to produce specialty alkynes and olefins, pharmaceutical building blocks, trace metal salts and solutions, low moisture/anhydrous salts, and specialty rare earth salts and solutions makes GFS a preferred partner for organizations across an array of industries. GFS works hand-in-hand with customers during the development processes of new chemical technologies. From research lab to pilot plant, from production to commercialization, GFS Chemicals is here to give you knowledgeable answers to any of your technical questions.

In addition to a proprietary product portfolio of 8,000 discrete high-quality products available from small bottles to drum quantities, GFS offers a full range of Karl Fischer reagents, PPT/PPB trace metal analysis grade acids, turbidity standards, UV-Vis standards, conductivity standards, pH buffers, OHR, and other high-quality materials for your QA/QC laboratory. GFS' technical staff readily works to understand the challenges our customers face, and delivers custom solutions to meet their needs. For more information, visit us online at [gfschemicals.com](http://gfschemicals.com) or call 800.858.9682 to speak with one of our friendly chemical specialists.



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## FINE & SPECIALTY ORGANICS

GFS Chemicals is a primary U.S. manufacturer of fine and specialty organic chemicals and a recognized leader in alkyne chemistry. Should we change to something like: We are an ISO 9001:2015 certified state-of-the-art production facility located in Columbus, Ohio. Our core technology platform includes the synthesis of internal and terminal alkynes, alkynols, conjugated diynes, and conjugated enynes. In addition to our core alkyne products, GFS Chemicals has expanded our portfolio to include functionalized amines, internal & terminal alkynes, unsaturated alcohols, esters, ketones and aldehydes, silyl intermediates, organometallics & Grignards, non-aqueous acids, specialty olefins, halogenated compounds, aromatics, and heterocyclics.

GFS Chemicals provides fine and specialty organics to both small research companies and Fortune 500 companies alike. Our chemicals can be found among diverse industries such as pharmaceuticals, electronics, agrochemicals, pheromones, flavors, and fragrance markets. When high purity and unique specifications are critical to the success of a project, GFS Chemicals will deliver as promised. Our commitment to safety and quality allows GFS Chemicals to manufacture products that very few other U.S. manufacturers can offer.



**Ask us about special packaging options for eliminating potential waste!**

# Alkenes

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
<b>CIS ALKENES</b>				
3303	cis-1-PROPENYLBENZENE, 95%	766-90-5	118.17	95
3184	cis-2-HEXENE, 95%	7688-21-3	84.16	95
3404	cis-2-OCTENE, 96%	7642-04-8	112.22	96
3265	cis-2-PENTENE, 96%	627-20-13	70.14	96
3187	cis-3-HEXENE, 97%	7642-09-3	84.16	97
3434	cis-3-OCTENE, 97%	14850-22-7	112.22	97
3237	cis-4-NONENE, 97%	10405-84-2	126.24	97
3254	cis-4-OCTENE, 97%	7642-15-1	112.22	97
3457	cis-5-DECENE, 96%	7433-78-5	140.27	96
<b>DIENES</b>				
3452	1,3,5-TRIMETHYL-1,4-CYCLOHEXADIENE, 98%	4074-23-1	122.22	98
3389	1,4-CYCLOHEXADIENE, 97%	628-41-1	80.13	97
3211	1-METHYL-1,4-CYCLOHEXADIENE, 97%	4313-57-9	94.16	97
<b>TERMINAL ALKENES</b>				
3437	1-AMINO-10-UNDECENE, 97%	62595-52-2	169.31	97
5529	1-AMINO-5-HEXENE, 98%	34825-70-2	99.17	98
3157	1-HEPTADECENE, 97%	6765-39-5	238.46	97
3160	1-HEPTENE, 98+%	592-76-7	98.19	98+
3235	1-NONENE, 98%	124-11-8	126.24	98
3262	1-PENTADECENE, 98%	13360-61-7	210.40	98
3318	1-TRIDECENE, 97%	2437-56-1	182.35	97
3366	1-UNDECENE, 97%	821-95-4	154.30	97
3212	2-METHYL-1-HEXENE, 97%	6094-02-6	98.19	97
5502	3-BROMO-2-METHYL-1-PROPENE, 98%	1458-98-6	135.00	98
5194	3-CYCLOHEXYL-1-PROPENE, 97%	2114-42-3	124.23	97
<b>TRANS ALKENES</b>				
3161	trans-2-HEPTENE, 98%	14686-13-6	98.19	98
3185	trans-2-HEXENE, 98%	4050-45-7	84.16	98
3252	trans-2-OCTENE, 97%	13389-42-9	112.22	97
3266	trans-2-PENTENE, 99%	646-04-8	70.14	99
3163	trans-3-HEPTENE, 97%	14686-14-7	98.19	97
3417	trans-3-HEXENE, 99%	13269-52-8	84.16	99
3253	trans-3-OCTENE, 97%	14919-01-8	112.22	97
3238	trans-4-NONENE, 96%	10405-85-3	126.24	96
3255	trans-4-OCTENE, 98%	14850-23-8	112.22	98
3073	trans-5-DECENE, 97%	7433-56-9	140.27	97
3405	trans-7-TETRADECENE, 97%	41446-63-3	196.38	97

# Alkynes

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
<b>AMIDES</b>				
3299	N-PROPARGYLOXYPHthalimide, 98%	4616-63-1	201.18	98
<b>DIYNES</b>				
3104	1,4-DIPHENYLBUTADIYNE, 98%	886-66-8	202.26	98
3101	1,6-DIPHENOXY-2,4-HEXADIYNE, 98%	30980-37-1	262.29	98
3248	1,7-OCTADIYNE, 98%	871-84-1	106.17	98
3234	1,8-NONADIYNE, 98%	2396-65-8	120.2	98
3072	1,9-DECADIYNE, 97%	1720-38-3	134.22	97
3180	2,4-HEXADIYNE, 99%	2809-69-0	78.12	99
3117	3,9-DODECADIYNE, 95%	61827-89-2	162.28	95
3309	5,9-TETRADECADIYNE, 95%	51255-61-9	190.33	95
<b>ESTERS</b>				
3497	4-ETHYNYLPHENYL ACETATE, 98%	16141-18-7	160.17	98
3278	4-PENTYN-1-YL ACETATE, 96%	14604-46-7	126.16	96
3386	ETHYL 2-HEXYNOATE, 98%	16205-90-6	140.19	98
5481	ETHYL 6-HEPTYNOATE, 97%	105339-02-4	154.21	97
3134	ETHYL ETHYNYL ETHER, 50% (W/W), in HEXANES	927-80-0	70.09	
3218	METHYL 10,12-PENTACOSADIYNOATE, 98%,	120650-77-3	388.61	98
3226	METHYL 10,12-TRICOSADIYNOATE, 97%, 50% SOLUTION in DCM	145609-79-6	360.57	97
3232	METHYL 10-UNDECYNOATE, 98%	2777-66-4	196.29	98
3909	METHYL 2-HEXYNOATE	18937-79-6	126.16	
3918	METHYL 2-OCTYNOATE, 98%	111-12-6	154.21	98
3926	METHYL 2-PENTYNOATE, 98%	24342-04-9	112.13	98
3215	METHYL 5-HEXANOATE, 95%	77758-51-1	126.16	95
<b>INTERNAL ALKYNES</b>				
5248	1,4-DIMETHOXY-2-BUTYNE, 98%	16356-02-8	114.14	98
3094	1-DIMETHYLAMINO-2-PENTYNE, 98%	7383-77-9	111.19	98
3889	1-METHOXY-1-BUTEN-3-YNE	2798-73-4	82.10	
3037	2-BUTYNYL ALDEHYDE DIETHYL ACETAL, 98%	2806-97-5	142.2	98
3038	2-BUTYNYL-p-TOLUENESULFONATE, 98%	56563-37-2	224.28	98
3194	2-HEXYNE, 98%	764-35-2	82.15	98
3214	2-METHYL-1-HEXYNE-3-YNE, 98%	23056-94-2	94.16	98
3905	2-METHYL-3-HEXYNE	36566-80-0	96.17	
3932	2-NONYNE, 98%	19447-29-1	124.23	98
3257	2-OCTYNE, 97%	2809-67-8	110.20	97
3422	2-OCTYNE, 99%	2809-67-8	94.16	99
3271	2-PENTYNE, 98%	627-21-4	68.12	98
3426	3-HEXYNE, 96%	928-49-4	82.15	96

# Alkynes

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
3209	3-METHYL-1-BUTYNE, 96%	598-23-2	68.13	96
2933	3-NONYNE, 98%	20184-89-8	124.23	98
3388	3-OCTYNE, 98%	15232-76-5	110.20	98
3368	3-UNDECYNE, 96%	60212-30-8	152.28	96
3410	4,4-DIMETHYL-2-PENTYNE, 98%	999-78-0	96.18	98
3152	4-ETHYNYLTOLUENE, 97%	766-97-2	116.15	97
3925	4-METHYL-2-PENTYNE, 97%	21020-27-9	82.15	97
3240	4-NONYNE, 98%	20184-91-2	124.23	98
3258	4-OCTYNE, 99%	1942-45-6	110.20	99
3122	6-DODECYNE, 98%	6975-99-1	166.31	98
3897	6-METHYL-3-HEPTYNE, 98%	54050-92-9	110.20	98
3406	7-TETRADECYNE, 97%	35216-11-6	194.36	97
3373	m-DIETHYNYLBENZENE, 98%	1785-61-1	126.15	98
3385	p-DIETHYNYLBENZENE, 98%	935-14-8	126.15	98
<b>KETONES</b>				
3203	3-HEXYN-2-ONE, 97%	1679-36-3	96.13	97
<b>PHENYLACETYLENES</b>				
3008	1,4-BIS-(PHENYLETHYNYL)BENZENE, 97%	1849-27-0	278.35	97
3933	3-ACETYLPHENYLACETYLENE, 98%	139697-98-6	144.17	98
3490	4-(t-BUTOXY)PHENYLACETYLENE, 98%	32569-86-1	174.24	98
3028	4-(tert-BUTYL)PHENYLACETYLENE, 95%	772-38-3	158.24	95
2935	4-ACETYLPHENYLACETYLENE, 98%	42472-69-5	144.17	98
3102	DIPHENYLACETYLENE, 98%	501-65-5	178.23	98
3279	PHENYLACETYLENE, 98+%	536-74-3	102.14	98+
<b>TERMINAL ALKYNES</b>				
3390	1-(DI-n-PROPYLAMINO)-2-PROPYNE, 98%	6323-79-1	139.24	98
3158	1,6-HEPTADIYNE, 97%	2396-63-6	92.14	97
3029	1-BUTYNE, 94%	107-00-6	54.09	94
3075	1-DECYNE, 98%	764-93-2	138.25	98
3120	1-DODECYNE, 98%	765-03-7	166.31	98
5228	1-EICOSYNE, 95%	765-27-5	278.52	95
3424	1-HEPTADECYNE, 97%	26186-00-5	236.44	97
3164	1-HEPTYNE, 98%	628-71-7	96.17	98
3173	1-HEXADECYNE, 90+%	629-74-3	222.42	90+
3193	1-HEXYNE, 98%	693-02-7	82.15	98
3239	1-NONYNE, 99%	3452-09-3	124.23	99
3461	1-OCTADECYNE, 95%	629-89-0	250.47	95
3256	1-OCTYNE, 97%	629-05-0	110.20	97

# Alkynes

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
3425	1-OCTYNE, 99%	629-05-0	110.20	99
3263	1-PENTADECYNE, 98%	765-13-9	208.39	98
3270	1-PENTYNE, 97%	627-19-0	68.12	97
3384	1-PENTYNE, 99%	627-19-0	68.12	99
3400	1-PHENYL-1-BUTYNE, 97%	622-76-4	130.19	97
3955	1-PHENYL-1-NONYNE, 98%	57718-18-0	200.33	98
3286	1-PHENYL-1-PROPYNE, 98%	673-32-5	116.16	98
3311	1-TETRADECYNE, 98%	765-10-6	194.36	98
3367	1-UNDECYNE, 97%	2243-98-3	152.28	97
3030	2-BUTYNE, 98%	503-17-3	54.09	98
3076	2-DECYNE, 96%	2384-70-5	138.25	96
3165	2-HEPTYNE, 98%	1119-65-9	96.17	98
3097	3,3-DIMETHYL-1-BUTYNE, 97%	917-92-0	82.15	97
3395	3-AMINO-3-METHYL-1-BUTYNE, 95%	2978-58-7	83.13	95
3066	3-CYCLOHEXYL-1-PROPYNE, 97%	17715-00-3	122.21	97
3433	3-CYCLOPENTYL-1-PROPYNE, 98%	116279-08-4	108.18	98
3082	3-DIBUTYLAMINO-1-PROPYNE, 98%	6336-58-9	167.3	98
3088	3-DIETHYLAMINO-1-PROPYNE, 98%	4079-68-9	111.19	98
3095	3-DIMETHYLAMINO-1-PROPYNE, 98%	7223-38-3	83.13	98
3166	3-HEPTYNE, 98%	2586-89-2	96.17	98
3421	3-METHYL-1-PENTYNE, 97%	922-59-8	82.15	97
3423	3-PHENYL-1-PROPYNE, 97%	10147-11-2	116.16	97
5535	4-CHLORO-1-BUTYNE, 99%	51908-64-6	88.54	99
3464	4-ETHYNYLANISOLE, 98%	768-60-5	132.16	98
3398	4-METHYL-1-PENTYNE, 98%	7154-75-8	82.15	98
3281	4-PHENYL-1-BUTYNE, 97%	16520-62-0	130.19	97
3077	5-DECYNE, 98%	1942-46-7	138.25	98
3093	5-DIMETHYLAMINO-2-METHYL-3-PENTYN-2-OL, 98%	25400-83-3	141.22	98
3907	5-METHYL-1-HEXYNE, 98%	2203-80-7	96.17	98
3284	5-PHENYL-1-PENTYNE, 98%	1823-14-9	144.22	98
3441	CYCLOHEXYLACETYLENE, 95%	931-48-6	108.18	95
3442	CYCLOPENTYLACETYLENE, 90+%	930-51-8	94.16	90+
3294	PROPARGYL ACRYLATE, 98%	10477-47-1	110.11	98
3296	PROPARGYLALDEHYDE DIETHYL ACETAL, 98%	10160-87-9	128.17	98
<b>OTHER ALKYNES</b>				
3408	1-CHLORO-2-PENTYNE, 98%	22592-15-0	102.57	98
3208	2-METHYL-1-BUTEN-3-YNE, 99%	78-80-8	66.10	99
9720	3-BUTYNYLAMINE, 97%	14044-63-4	69.11	97



# Alkynes

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
5261	4,4'-DIFLUORODIPHENYLACETYLENE, 98%	5216-31-9	214.21	98
5378	4-ETHYNYLANILINE, 99%	14235-81-5	117.15	99
9722	5-HEXYNYLAMINE, 97%	15252-45-6	97.16	97
3485	TRIBUTYLSTANNYLACETYLENE, 95%	994-89-8	315.07	95

## Other Functional Organics Materials

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
<i>ALCOHOLS</i>				
3217	3-METHYL-3-OXETANEMETHANOL, 98%	3143-02-0	102.13	98
<i>AMIDES</i>				
2559	ACETAMIDE OXIME, 96%	22059-22-9	74.09	96
507	DIPHENYLACETAMIDE	519-87-9	211.27	
<i>ESTERS</i>				
3129	2,3-EPOXYBUTANE, 98%, cis, trans mixture	3266-23-7	72.11	98
3132	ETHYL 2-BUTYNOATE, 98%	4341-76-8	112.14	98
3136	ETHYL 2-HEPTYNOATE, 98%	16930-95-3	154.21	98
3137	ETHYL 2-OCTYNOATE, 98%	10519-20-7	168.24	98
3139	ETHYL 2-PENTYNOATE, 98%	55314-57-3	126.16	98
3140	ETHYL 3-PHENYLPROPIOLATE, 98%	2216-94-6	174.20	98
3141	ETHYL PROPIOLATE, 98%	623-47-2	98.10	98
3448	METHYL 2-BUTYNOATE, 96%	23326-27-4	98.10	96
3128	trans-2,3-EPOXYBUTANE, 97%	21490-63-1	72.11	97
<i>NITRILES</i>				
3371	PENTANENITRILE, 98%	110-59-8	83.15	98

## Aromatics & Heterocyclics

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
<b>AROMATICS</b>				
2369	3,3,3',3'-TETRAMETHYL-1,1'-SPIROBISINDANE-5,5',6,6'-TETROL	77-08-7	340.42	90
1877	QUINHYDRONE, 97.0%	106-34-3	218.21	97
<b>HETEROCYCLIC COMPOUNDS</b>				
5538	2,5-DIMETHYLPYRROLE, 98%	625-84-3	95.14	98
381	4,4'-DICARBOXY-2,2'-BIQUINOLINE	1245-13-2	344.33	
1287	8-HYDROXYQUINOLINE SULFATE, 97%	207386-91-2	203.21	97
1114	BENZOFUROXAN, 98%	480-96-6	136.11	98
<b>PHENANTHROLINES</b>				
584	4,7-PHENANTHROLINE, 98%	230-07-9	180.22	98
108	BATHOPHENANTHROLINE, 99%	1662-01-7	332.41	99
163	tris-(1,10-PHENANTHROLINE) FERROUS PERCHLORATE	14586-54-0	795.35	
<b>PYRIDINES</b>				
177	2,2',2''-TERPYRIDINE, 98+%	1148-79-4	233.27	98+
109	2,2'-BIPYRIDINE, 99%, REAGENT (ACS)	366-18-7	156.18	99
5382	2,4,6-TRI(4-PYRIDYL)-1,3,5-TRIAZINE, 98%	42333-78-8	312.33	98
3151	2-ETHYNYLPYRIDINE, 98+%	1945-84-2	103.12	98+
127	4,4'-DIMETHYL-2,2'-BIPYRIDINE, 97%	1134-35-6	184.23	97
5522	4,4'-DINONYL-2,2'-BIPYRIDINE, 98%	142646-58-0	408.66	98
2377	BIS-(2,2',2''-TERPYRIDINE) RUTHENIUM (II) CHLORIDE	168922-04-1	638.52	
114	tris-(2,2'- BIPYRIDINE) RUTHENIUM (III) CHLORIDE, HYDRATE	50525-27-4	748.62	

## Organometallics & Grignard Reagents

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
<b>GRIGNARD REAGENTS</b>				
9179	1-PROPYNYLMAGNESIUM BROMIDE, 0.5 M, SOLUTION in THF	16466-97-0	143.28	
5204	4-BENZYLOXYPHENYL MAGNESIUM BROMIDE, in THF	120186-59-6	287.45	
5561	ISOPROPENYLMAGNESIUM BROMIDE, 1.5 M, in METHYL THF	13291-18-4	145.28	
5291	ISOPROPENYLMAGNESIUM BROMIDE, .05 M, in THF	13291-18-4	145.28	
4523	ISOPROPYL MAGNESIUM CHLORIDE, 2 M, in THF	1068-55-9	102.85	
5501	n-BUTYLMAGNESIUM CHLORIDE, 2 M, in THF	693-04-9	116.87	
2974	PHENYLMAGNESIUM CHLORIDE, 2 M, in THF	100-59-4	136.87	
3721	tert-BUTYLMAGNESIUM CHLORIDE, 1 M, in THF	677-22-5	116.88	
<b>ORGANOMETALLICS</b>				
2776	TRIPHENYLPHOSPHINE, 99%	603-35-0	262.29	99

# Halogenated Compounds

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
<b>ORGANIC BROMIDES</b>				
5560	1-BROMO-1-BUTYNE, 98%	50405-39-5	132.99	98
2379	1-BROMO-2,2-DIMETHYLPROPANE, 98%	630-17-1	151.05	98
3015	1-BROMO-2-BUTYNE, 98%	3355-28-0	132.99	98
3019	1-BROMO-2-OCTYNE, 96%	18495-27-7	189.10	96
3020	1-BROMO-2-PENTYNE, 97%	16400-32-1	147.01	97
5283	2-BROMOPROPENE, 99%	557-93-7	120.98	99
5203	4-BENZYLOXYBROMOBENZENE, 98%	6793-92-6	263.14	98
5318	4-BROMO-1-BUTYNE, 98%	38771-21-0	132.99	98
4737	5-BROMO-1-PENTENE, 97%	1119-51-3	149.04	97
9561	7-BROMO-1-HEPTENE, 96%	4117-09-3	177.08	96
5252	7-BROMO-1-HEPTENE, 98%	4117-09-3	177.08	98
5343	8-BROMO-1-OCTENE, 98%	2695-48-9	191.11	98
5310	cis-1-BROMOPROPENE, 98%	590-13-6	120.98	98
<b>ORGANIC CHLORIDES</b>				
2530	1-CHLORO-2,2-DIMETHYLPROPANE, 98%	753-89-9	106.60	98
3052	1-CHLORO-4-NONYNE, 98%	3416-74-8	158.67	98
3432	1-CHLORO-5-DECYNE, 98%	54377-34-3	172.70	98
3048	3-CHLORO-3-METHYL-1-BUTYNE, 97%	1111-97-3	102.56	97
3054	5-CHLORO-1-PENTYNE, 96%, TECHNICAL	14267-92-6	102.57	96
3053	5-CHLORO-1-PENTYNE, 98%	14267-92-6	102.57	98
3045	6-CHLORO-1-HEXENE, 97%	928-89-2	118.61	97
3046	6-CHLORO-1-HEXYNE, 97%	10297-06-0	116.59	97
5300	7-CHLORO-1-HEPTENE, 97%	929-21-5	132.63	97
5344	8-CHLORO-1-OCTENE, 97%	871-90-9	146.66	97
5667	8-CHLORO-1-OCTYNE, 98%	24088-97-9	144.64	98
2938	TRICHLOROMELAMINE, 95%	7673-09-8	229.46	95
<b>ORGANIC IODIDES</b>				
2532	1-iodo-2,2-dimethylpropane, 98%	15501-33-4	198.05	98
3467	1-iodo-3,3-dimethylbutane	15672-88-5	212.07	97.5
3483	1-iododecane, 98%	2050-77-3	268.18	98

# Silyl Intermediates

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
5508	(N,N-DIMETHYLAMINO)TRIMETHYLSILANE, 98+%	2083-91-2	117.26	98+
3325	(TRIETHYLSILYL)ACETYLENE, 97%	1777-03-3	140.30	97
3349	1-(TRIMETHYLSILYL)-1-HEXYNE, 98%	3844-94-8	154.33	98
3350	1-(TRIMETHYLSILYL)IMIDAZOLE, 97%	18156-74-6	140.26	97
3347	1-(TRIMETHYLSILYLETHYNYL)CYCLOHEXENE, 98%	17988-44-2	178.35	98
3011	1,4-BIS-(TRIMETHYLSILYL)-1,3-BUTADIYNE, 98%	4526-07-2	194.43	98
3012	1,3-BIS-(TRIMETHYLSILYLETHYNYL)BENZENE, 96%	38170-80-8	270.50	96
3013	1,4-BIS-(TRIMETHYLSILYLETHYNYL)BENZENE, 98%	17938-13-5	270.50	98
3469	1-BROMO-4-TRIMETHYLSILYLBENZENE, 97%	6999-03-7	229.20	97
3057	1-CHLORO-5-(TRIMETHYLSILYL)-4-PENTYNE, 98%	77113-48-5	174.75	98
3055	1-CHLORO-5-TRIETHYLSILYL-4-PENTYNE, 97%	174125-30-5	216.83	97
3096	1-DIMETHYLAMINO-3-(TRIMETHYLSILYL)-2-PROPYNE, 98%	56849-88-8	155.31	98
3289	1-PHENYL-2-TRIMETHYLSILYLACETYLENE, 98%	2170-06-1	174.32	98
3356	1-TRIMETHYLSILYL-1,4-PENTADIYNE, 96%	71789-10-1	136.27	96
3345	1-TRIMETHYLSILYL-3,3-DIMETHYL-1-BUTYNE, 98%	14630-42-3	154.33	98
3353	1-TRIMETHYLSILYLOXY-3-BUTYNE, 98%	17869-75-9	142.27	98
3348	2-(TRIMETHYLSILYLETHYNYL)PYRIDINE, 97%	86521-05-3	175.29	97
3228	2-METHYL-4-TRIMETHYLSILYL-3-BUTYN-2-OL, 98%	5272-33-3	156.30	98
3420	3-BROMO-1-TRIMETHYLSILYL-1-PROPYNE, 97%	38002-45-8	191.15	97
3229	3-METHYL-3-TIMETHYLSILYLOXY-1-BUTYNE, 99%	17869-77-1	156.30	99
3359	3-TRIMETHYLSILYLPROPARGYL ALCOHOL, 98%	5272-36-6	128.25	98
3326	4-(TRIETHYLSILYL)-3-BUTYN-1-OL, 98%	160194-29-6	184.35	98
3342	4-TRIMETHYLSILYL-3-BUTYN-1-OL, 98%	2117-12-6	142.27	98
3344	4-TIMETHYLSILYL-3-BUTYN-2-ONE, 98%	5930-98-3	140.26	98
9478	6,13-BIS(TRIISOPROPYLSILYLETHYNYL)PENTACENE	373596-08-8	639.07	
3056	6-CHLORO-1-TRIMETHYLSILYLOXYHEXANE, 97%	34714-00-6	208.80	97
3010	BIS-(TRIMETHYLSILYL)ACETYLENE, 98%	14630-40-1	170.41	98
3146	ETHYL 3-(TRIMETHYLSILYL)PROPIOLATE, 98%	16205-84-8	170.28	98
3337	TRIISOPROPYLSILYLACETYLENE, 97%	89343-06-6	182.38	97
3068	TRIMETHYLSILYLETHYNYLCYCLOPROPANE, 96%	81166-84-9	138.28	96
3360	TRIMETHYLSILYLOXYPROPYNE, 98%	5582-62-7	128.25	98

## Specialty Amines

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
3854	DIPROARGYLAMINE, 97%	6921-28-4	93.13	97
3588	HYDRAZINE, 35% (W/W) AQUEOUS SOLUTION	302-01-2	32.05	
5551	N-(tert-BUTOXYCARBONYL)PROPARGYLAMINE, 98%	92136-39-5	155.19	98
3928	N-METHYLPROPARGYLAMINE, 98%	35161-71-8	69.11	98
2345	PHENYLHYDRAZINE HYDROCHLORIDE, 99%, REAGENT	59-88-1	144.61	99
3959	PROPARGYLAMINE, 99%	2450-71-7	55.08	99
2773	TRIBUTYLAMINE, 98%	102-82-9	185.36	98
3969	TRIPROPARGYLAMINE, 98%	6921-29-5	131.18	98

## Unsaturated Alcohols

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
3033	2-BUTYN-1-OL, 98%	764-01-2	70.09	98
3034	3-BUTYN-1-OL, 98%	927-74-2	70.09	98
3035	(+/-) 3-BUTYN-2-OL, 98%	2028-63-9	70.09	98
3069	4,6-DECADIYN-1,10-DIOL, 97%	70283-74-8	166.21	97
3078	2-DECYN-1-OL, 97%	4117-14-0	154.25	97
3079	3-DECYN-1-OL, 98%	51721-39-2	154.25	98
3080	5-DECYN-1-OL, 96%	68274-97-5	154.25	96
3087	4-DIETHYLAMINO-2-BUTYN-1-OL, 98%	10575-25-4	141.21	98
3100	2,7-DIMETHYL-3,5-OCTADIYN-2,7-DIOL, 96%	5929-72-6	166.22	96
3110	1,1-DIPHENYL-2-PROPYN-1-OL, 97%	3923-52-2	208.26	97
3115	5,7-DODECADIYN-1,12-DIOL, 95%	74602-32-7	194.26	95
3125	5,7-EICOSADIYN-1-OL, 97%	174063-93-5	290.49	97
3149	1-ETHYNYL-1-CYCLOPENTANOL, 98+%	17356-19-3	110.16	98+
3150	9-ETHYNYL-9-FLUORENOL, 97%	13461-74-0	206.25	97
3168	1-HEPTYN-3-OL, 98%	7383-19-9	112.17	98
3169	2-HEPTYN-1-OL, 98%	1002-36-4	112.17	98
3170	3-HEPTYN-1-OL, 98%	14916-79-1	112.17	98
3171	4-HEPTYN-2-OL, 97%	19781-81-8	112.17	97
3178	2,4-HEXADIYN-1,6-DIOL, 97%	3031-68-3	110.11	97
3190	cis-3-HEXEN-1-OL, 98%	928-96-1	100.16	98
3198	1-HEXYN-3-OL, 98%	105-31-7	98.15	98
3199	2-HEXYN-1-OL, 97%	764-60-3	98.15	97
3200	3-HEXYN-1-OL, 98%	1002-28-4	98.15	98
3202	5-HEXYN-1-OL, 97%	928-90-5	98.15	97

# Unsaturated Alcohols

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
3204	3-ETHYNYLPHENOL, 95%	10401-11-3	118.14	95
3216	2-METHYL-5-OCTYN-4-OL, 98%	60657-70-7	140.22	98
3222	3-METHYL-1-PENTYN-3-OL, 98+%	77-75-8	98.15	98+
3223	4-METHYL-1-PENTYN-3-OL, 98%	565-68-4	98.15	98
3242	2-NONYN-1-OL, 98%	5921-73-3	140.23	98
3243	3-NONYN-1-OL, 98%	31333-13-8	140.23	98
3249	3,5-OCTADIYN-1,8-DIOL, 96%	15808-23-8	138.17	96
3259	2-OCTYN-1-OL, 98%	20739-58-6	126.20	98
3260	3-OCTYN-1-OL, 98%	14916-80-4	126.20	98
3269	4-PENTEN-1-OL, 98%	821-09-0	86.13	98
3274	2-PENTYN-1-OL, 98%	6261-22-9	84.12	98
3275	3-PENTYN-1-OL, 98%	10229-10-4	84.12	98
3276	4-PENTYN-1-OL, 98%	5390-04-5	84.12	98
3277	(+/-)-4-PENTYN-2-OL, 98%	2117-11-5	84.12	98
3282	2-PHENYL-3-BUTYN-2-OL, 99%	127-66-2	146.19	99
3283	4-PHENYL-2-METHYL-3-BUTYN-2-OL, 98%	1719-19-3	160.22	98
3287	1-PHENYL-2-PROPYN-1-OL, 98%	4187-87-5	132.16	98
3312	7-TETRADECYN-6,9-DIOL, 95%	174064-00-7	226.36	95
3364	1,1,3-TRIPHENYLPROPARGYL ALCOHOL, 99%	1522-13-0	284.36	99
3370	10-UNDECYN-1-OL, 97%	2774-84-7	168.28	97
3379	2-METHYL-3-HEXYN-2-OL, 98%	5075-33-2	112.17	98
3391	4-HEXYN-3-OL, 98%	20739-59-7	98.15	98
3392	5-HEXYN-3-OL, 98%	19780-84-8	98.15	98
3399	PROPARGYL ALCOHOL TETRAHYDRO-2H-PYRAN ETHER, 98%	6089-04-9	140.18	98
3447	3-HEXYN-1,6-DIOL, 97%	85655-98-7	114.15	97
3456	1-OCTEN-4-OL, 98%	40575-42-6	128.21	98
3807	3-BUTEN-1-OL, 98%	627-27-0	72.11	98
3841	6,6-DIMETHYL-1-HEPTEN-4-YN-3-OL, 98%	78629-20-6	138.21	98
3880	4-HEPTYN-3-OL, 97%	32398-69-9	112.17	97
3927	2-METHYL-3-PENTYN-2-OL, 99%	590-38-5	98.15	99
3937	1-OCTYN-3-OL, 97%	818-72-4	126.20	97
3966	2-TRIDECYN-1-OL, 97%	51887-25-3	196.33	97
5517	7-OCTYN-1-OL, 97%	871-91-0	126.20	97
5542	cis-2-BUTEN-1-OL, 96%	4088-60-2	72.11	96
5589	2-BUTYN-1-OL TETRAHYDRO-2H-PYRAN ETHER	39637-48-4	154.20	96.5

# INORGANIC COMPOUNDS

GFS Chemicals is a leading manufacturer of a wide range of inorganic chemicals specializing in low moisture and low trace metal grade materials. We offer a variety of high purity salts and solutions of alkali metals, alkaline earth compounds, perchlorates, heavy metals, rare earths, transition metals, silver/precious metals, and triflates. We serve a diverse set of industry segments including electronics, automotive, pharmaceuticals, material sciences, and battery and power storage.

GFS Chemicals can offer customized specifications on nearly any product and can scale up from lab and pilot scale to full-scale production using our extensive plant capabilities, with equipment ranging from 15 gallons to 2,000-gallon capacity. Our in-house analytical laboratory facilities help provide quality control and offer unparalleled testing accuracy. With in-house ICP-OES capabilities, our technical staff is able to quantify trace metal impurities accurately on every batch. Every batch manufactured at GFS is thoroughly tested to ensure it meets our guaranteed specifications.

## Ammonium Compounds

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
5003	AMMONIUM CHLORIDE, 99.999%	12125-02-9	53.49	99.999
5963	AMMONIUM CITRATE, DIBASIC, PURIFIED	3012-65-5	226.2	98
601	AMMONIUM IODATE, REAGENT	13446-09-8	192.94	99
646	AMMONIUM NITRATE, REAGENT (ACS)	6484-52-2	80.04	95
5127	AMMONIUM NITRATE, 99.999%	6484-52-2	80.04	99.999
715	AMMONIUM OXALATE, REAGENT (ACS)	6009-70-7	142.11	99
3	AMMONIUM PERCHLORATE, REAGENT	7790-98-9	117.50	
847	AMMONIUM SULFAMATE, REAGENT (ACS)	7773-06-0	114.11	98

## Ammonium Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
3520	AMMONIUM TRIFLUOROMETHANESULFONATE, 99%	38542-94-8	167.11	99
3773	HYDROXYLAMMONIUM SULFATE, 99.999%	10039-54-0	164.15	99.999
2432	TETRABUTYLAMMONIUM CHLORIDE, 1.0 M AQUEOUS	1112-67-0	277.92	
2433	TETRABUTYLAMMONIUM DIHYDROGEN PHOSPHATE	5574-97-0	339.46	99
394	TETRABUTYLAMMONIUM PERCHLORATE, REAGENT	1923-70-2	341.93	98
1514	TETRAETHYLAMMONIUM CHLORIDE, MONOHYDRATE, 98%	68696-18-4	183.72	98
2439	TETRAETHYLAMMONIUM HYDROXIDE, 1.0 M, AQUEOUS SOLUTION	77-98-5	147.26	
511	TETRAETHYLAMMONIUM PERCHLORATE	2567-83-1	229.71	98
366	TETRAHEXYLAMMONIUM IODIDE, REAGENT	2138-24-1	481.67	99
512	TETRAHEXYLAMMONIUM PERCHLORATE	4656-81-9	454.14	
2275	TETRAMETHYLAMMONIUM HYDROXIDE, SOLUTION, 1.0 mol/L in WATER, REAGENT (ACS)	75-59-2	91.15	
510	TETRAMETHYLAMMONIUM PERCHLORATE	2537-36-2	173.60	98
2525	TETRAMETHYLAMMONIUM SILICATE, 18%, AQUEOUS SOLUTION	53116-81-7	211.32	
596	TRIMETHYLAMMONIUM PERCHLORATE, REAGENT	15576-35-9	159.57	

## Alkaline Earth Compounds

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
602	BARIUM CHLORIDE, DIHYDRATE, REAGENT (ACS)	10326-27-9	244.28	99
5	BARIUM IODATE, REAGENT	7787-34-0	505.15	
7	BARIUM PERCHLORATE TRIHYDRATE, REAGENT	13465-95-7	336.23	
8	BARIUM PERCHLORATE, TRIHYDRATE, REAGENT	10294-39-0	390.23	98
3484	BARIUM TRIFLUOROACETATE, 99%	60884-92-6	363.58	99
3521	BARIUM TRIFLUOROMETHANESULFONATE, 98%	2794-60-7	435.48	98
521	CALCIUM IODATE, REAGENT	7789-80-2	389.90	
779	CALCIUM NITRATE, TETRAHYDRATE , REAGENT (ACS)	13477-34-4	236.16	99
12	CALCIUM PERCHLORATE, HYDRATED, REAGENT	15627-86-8	311.06	
3522	CALCIUM TRIFLUOROMETHANESULFONATE	55120-75-7	338.22	98
1447	MAGNESIUM BROMIDE, HEXAHYDRATE	13446-53-2	292.20	99
54	MAGNESIUM PERCHLORATE, ANHYDROUS, REAGENT (ACS)	10034-81-8	223.23	
55	MAGNESIUM PERCHLORATE, ANHYDROUS, REAGENT (ACS)	10034-81-8	223.23	



# Alkaline Earth Compounds

ITEM #	PRODUCT NAME	CAS #
56	MAGNESIUM PERCHLORATE, HEXAHYDRATE, REAGENT	13446-19-0
589	MAGNESIUM PERCHLORATE, SOLUTION	13446-19-0
807	STRONTIUM CHLORIDE HEXAHYDRATE, REAGENT (ACS)	10025-70-4
808	STRONTIUM NITRATE, REAGENT (ACS)	10042-76-9
5168	STRONTIUM PERCHLORATE, ANHYDROUS, REAGENT	13450-97-0
96	STRONTIUM PERCHLORATE, TRIHYDRATE, REAGENT	15650-09-6
A7680	STRONTIUM SULFATE, REAGENT	7759-02-6

# Lithium & Akali Metal Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
886	CESIUM CHLORIDE, REAGENT	7647-17-8	168.36	99.5
A1741	CESIUM NITRATE, 99.9%	7789-18-6	194.91	99.9
887	CESIUM NITRATE, REAGENT	7789-18-6	194.91	99
341	CESIUM PERCHLORATE, REAGENT	13454-84-7	232.37	99
2540	DIPOTASSIUM PHTHALATE, 98%	4409-98-7	242.32	98
303	LITHIUM ACETATE, DIHYDRATE, REAGENT	6108-17-4	102.01	
A4305	LITHIUM CARBONATE, 99.99%	554-13-2	73.89	99.99
5034	LITHIUM CARBONATE, 99.999%	554-13-2	73.89	99.999
2297	LITHIUM CARBONATE, HIGH PURITY, OPTICAL GRADE	554-13-2	73.89	99.99
1432	LITHIUM CITRATE, REAGENT	6080-58-6	281.99	
1433	LITHIUM FORMATE, REAGENT	6108-23-2	69.98	98
3121	LITHIUM HYDROXIDE, ANHYDROUS, REAGENT	1310-65-2	23.94	96
3651	LITHIUM HYDROXIDE, MONOHYDRATE	1310-66-3	41.96	98
395	LITHIUM IODATE, REAGENT	13765-03-2	181.85	91
2595	LITHIUM IODIDE, ANHYDROUS	10377-51-2	133.84	99
940	LITHIUM IODIDE, REAGENT	7790-22-9	187.89	
304	LITHIUM METABORATE, ANHYDROUS, REAGENT	13453-69-5	49.76	
611	LITHIUM NITRATE, REAGENT	7790-69-4	68.95	99
221	LITHIUM PERCHLORATE, ANHYDROUS, REAGENT (ACS)	7791-03-9	106.40	95
2574	LITHIUM PERCHLORATE, ANHYDROUS, SPECIAL REAGENT (ACS)	7791-03-9 7791-03-9	106.40	
233	LITHIUM PERCHLORATE, BATTERY GRADE	7791-03-9	106.40	99
53	LITHIUM PERCHLORATE, TRIHYDRATE, (ACS) REAGENT	13453-78-6	160.45	

# Lithium & Alkali Metal Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
315	LITHIUM PERIODATE, REAGENT	21111-84-2	233.89	99.99
2972	LITHIUM PHOSPHATE, TRIBASIC	10377-52-3	115.79	98
6121	LITHIUM SULFATE, ANHYDROUS	10377-48-7	109.93	99
819	LITHIUM TETRABORATE, 99.9%	12007-60-2	169.12	99.9
2533	LITHIUM TRIFLUOROMETHANESULFONATE	33454-82-9	156.01	
987	POTASSIUM CHLORATE, REAGENT (ACS)	3811-04-9	122.55	99
2578	POTASSIUM CITRATE, MONOBASIC, DIHYDRATE, REAGENT	132854-96-7	266.25	99
2263	POTASSIUM CITRATE, MONOBASIC, REAGENT	866-83-1	230.22	99
554	POTASSIUM ACID PHTHALATE, PRIMARY STANDARD (ACS)	877-24-7	204.23	99.95
996	POTASSIUM OXALATE MONOHYDRATE, REAGENT (ACS)	6487-48-5	184.24	98.5
297	POTASSIUM PERCHLORATE, 100 MESH, REAGENT (ACS)	7778-74-7	138.55	99
373	POTASSIUM PERCHLORATE, COMMERCIAL	7778-74-7	138.55	99
80	POTASSIUM PERCHLORATE, REAGENT (ACS)	7778-74-7	138.55	99
5084	POTASSIUM PERIODATE, 99.99%	7790-21-8	230.00	99.99
593	POTASSIUM PERIODATE, COMMERCIAL	7790-21-8	230.00	
81	POTASSIUM PERIODATE, REAGENT (ACS)	7790-21-8	230.00	99.8
1486	RUBIDIUM CHLORIDE, 99.9%	7791-11-9	120.92	99.9
1015	RUBIDIUM CHLORIDE, REAGENT	7791-11-9	120.92	99
1016	RUBIDIUM NITRATE, 99.8%	13126-12-0	147.48	99.8
340	RUBIDIUM PERCHLORATE, REAGENT	13510-42-4	184.94	98
7050	SODIUM CARBONATE, ANHYDROUS, 99.99%	497-19-8	105.99	99.99
1029	SODIUM CHLORATE, REAGENT (ACS)	7775-09-9	106.44	99
89	SODIUM IODATE, REAGENT	7681-55-2	197.92	99.7
93	SODIUM META PERIODATE, REAGENT (ACS)	7790-28-5	213.89	99.8
658	SODIUM NITRATE, REAGENT (ACS)	7631-99-4	84.99	99
559	SODIUM NITRITE, REAGENT (ACS)	7632-00-0	69.00	97
1099	SODIUM OXALATE, REAGENT (ACS)	62-76-0	134.00	99.5
659	SODIUM PARA PERIODATE, COMMERCIAL	13940-38-0	293.89	95
94	SODIUM PARA PERIODATE, REAGENT	13940-38-0	293.89	99
91	SODIUM PERCHLORATE, ANHYDROUS, REAGENT (ACS)	7601-89-0	122.46	98
9201	SODIUM PERCHLORATE, MONOHYDRATE, (ACS), HPLC	7791-07-3	140.48	
92	SODIUM PERCHLORATE, MONOHYDRATE, REAGENT (ACS)	7791-07-3	140.48	
3230	SODIUM PERCHLORATE, SOLUTION, 60%	7601-89-0	122.46	
5965	SODIUM PHOSPHATE, TRIBASIC	7601-54-9	163.94	96
805	SODIUM TARTRATE, DIHYDRATE, REAGENT (ACS)	6106-24-7	230.08	99
1692	SODIUM TETRABORATE, ANHYDROUS, REAGENT	1330-43-4	201.22	98
3543	SODIUM TRIFLUOROMETHANESULFONATE, 98%	2926-30-9	172.06	98

# Rare Earth Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
13	CERIC AMMONIUM NITRATE, REAGENT (ACS)	16774-21-3	548.23	98.5
768	CERIC AMMONIUM NITRATE, COMMERCIAL	16774-21-3	548.23	95
7683	CERIC AMMONIUM NITRATE, ELECTRONICS GRADE	16774-21-3	548.23	98
2909	CERIC AMMONIUM NITRATE, SUPERIOR REAGENT (ACS)	16774-21-3	548.23	98.5
16	CERIC AMMONIUM SULFATE, DIHYDRATE, REAGENT (ACS)	10378-47-9	632.58	94
17	CERIC HYDROXIDE, REAGENT	12014-56-1	208.16	
1575	CERIC NITRATE, SOLUTION, 1.5 N	13093-17-9	514.18	
2206	CERIC SULFATE, 99.99%	17106-39-7	528.43	99.99
24	CERIC SULFATE, REAGENT	17106-39-7	528.43	85
2258	CERIC SULFATE, TETRAHYDRATE	10294-42-5	404.33	85
2201	CEROUS ACETATE, 99.99%	17829-82-2	344.28	99.99
27	CEROUS AMMONIUM NITRATE, HYDRATED, REAGENT	13083-04-0	558.29	98
2902	CEROUS CHLORIDE, ANHYDROUS	7790-86-5	246.47	98
29	CEROUS CHLORIDE, HEPTAHYDRATE, REAGENT	18618-55-8	372.61	99
A1635	CEROUS CHLORIDE, HYDRATED, 99.9%	18618-55-8	372.61	99.9
2202	CEROUS CHLORIDE, HYDRATED, 99.99%	18618-55-8	372.61	99.99
A1653	CEROUS NITRATE, HYDRATED, 99.9%	10294-41-4	434.25	99.9
2203	CEROUS NITRATE, HYDRATED, 99.99%	10294-41-4	434.25	99.99
30	CEROUS NITRATE, HYDRATED, REAGENT	10294-41-4	434.25	99
3740	CEROUS PERCHLORATE, CRYSTALLINE HYDRATE	14017-47-1	492.36	
32	CEROUS PERCHLORATE, HYDRATED, REAGENT	14017-47-1	546.57	
33	CEROUS SULFATE, HYDRATED, REAGENT	10450-59-6	712.55	
A2796	DYSPROSIUM ACETATE, 99.9%	15280-55-4	411.70	99.9
3563	DYSPROSIUM CHLORIDE, HEXAHYDRATE, 99.9%	15059-52-6	376.96	99.9
A2826	DYSPROSIUM NITRATE, 99.999%	10031-49-9	438.60	99.999
3817	DYSPROSIUM OXALATE, 99.9%	867-62-9	769.23	99.9
3830	DYSPROSIUM PERCHLORATE, CRYSTALLINE HYDRATE	14017-53-9	460.86	
523	DYSPROSIUM PERCHLORATE, HYDRATED, SOLUTION, REAGENT	14692-17-2	568.95	
A2871	ERBIUM CHLORIDE, 99.9%, HEXAHYDRATE	10025-75-9	381.72	99.9
A2889	ERBIUM NITRATE, PENTAHYDRATE, 99.9%	10031-51-3	443.36	99.9
2213	ERBIUM NITRATE, PENTAHYDRATE, 99.99%	10031-51-3	443.36	99.99
524	ERBIUM PERCHLORATE, HYDRATED, SOLUTION, REAGENT	14692-15-0	573.70	
3477	ERBIUM TRIFLUOROACETATE	70236-99-6	506.31	99.9
3527	ERBIUM TRIFLUOROMETHANESULFONATE, 98%	139177-64-3	614.47	98
A3039	EUROPIUM CHLORIDE, HEXAHYDRATE, 99.9%	13759-92-7	366.41	99.9
637	EUROPIUM PERCHLORATE, HYDRATED, SOLUTION, REAGENT	13537-22-9	558.41	
A3186	GADOLINIUM CHLORIDE, HEXAHYDRATE, 99.9%	13450-84-5	371.70	99.9

# Rare Earth Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
A3213	GADOLINIUM NITRATE, HEXAHYDRATE, 99.9%	19598-90-4	451.37	99.9
2216	GADOLINIUM NITRATE, HEXAHYDRATE, 99.99%	19598-90-1	451.37	99.99
525	GADOLINIUM PERCHLORATE, HYDRATED, SOLUTION, REAGENT	14017-52-8	563.71	
3529	GADOLINIUM TRIFLUOROMETHANESULFONATE, 98%	52093-29-5	604.46	98
5910	GFS ETCHANT FORMULA 10			
5912	GFS ETCHANT FORMULA 12			
5913	GFS ETCHANT FORMULA 13			
1252	HOLMIUM CHLORIDE, HEXAHYDRATE, 99.9%	14914-84-2	379.38	99.9
A3588	HOLMIUM NITRATE, HEXAHYDRATE, 99.9%	35725-31-6	459.05	99.9
526	HOLMIUM PERCHLORATE, HYDRATED, SOLUTION, REAGENT	14017-54-0	571.38	
A4014	LANTHANUM ACETATE, HYDRATED, 99.9%	25721-92-0	343.07	99.9
2218	LANTHANUM CHLORIDE, HEPTAHYDRATE, 99.9%	10025-84-0	371.37	99.9
A4042	LANTHANUM CHLORIDE, HEPTAHYDRATE, 99.99%	10025-84-0	371.37	99.99
634	LANTHANUM CHLORIDE, HEPTAHYDRATE, REAGENT (ACS)	10025-84-0	371.37	
A4065	LANTHANUM NITRATE, HEXAHYDRATE, 99.9%	10277-43-7	433.03	99.9
A4068	LANTHANUM NITRATE, HEXAHYDRATE, 99.99%	10277-43-7	433.03	99.99
A4069	LANTHANUM NITRATE, HEXAHYDRATE, 99.999%	10277-43-7	433.03	99.999
633	LANTHANUM NITRATE, HEXAHYDRATE, REAGENT	10277-43-7	433.03	
5139	LANTHANUM PERCHLORATE, CRYSTALLINE HYDRATE	14017-46-0	491.39	
527	LANTHANUM PERCHLORATE, HYDRATED, REAGENT	36907-37-6	545.36	
3478	LANTHANUM TRIFLUOROACETATE	70236-92-9	477.95	99.9
A4521	LUTETIUM CHLORIDE, 99.9%, HEXAHYDRATE	15230-79-2	389.42	99.9
5145	LUTETIUM NITRATE, 99.9%, HEXAHYDRATE	36549-50-5	469.08	99.9
A4539	LUTETIUM NITRATE, 99.99%, HEXAHYDRATE	36549-50-5	469.08	99.99
639	LUTETIUM PERCHLORATE, HYDRATED, 50% SOLUTION	14646-29-8	581.42	
A5190	NEODYMIUM ACETATE, 99.9%	6192-13-8	339.39	99.9
A5208	NEODYMIUM CHLORIDE, 99.9%, HEXAHYDRATE	13477-89-9	358.70	99.9
2221	NEODYMIUM CHLORIDE, 99.99%, HEXAHYDRATE	13477-89-9	358.70	99.99
A5232	NEODYMIUM NITRATE, 99.9%	16454-60-7	438.36	99.9
2222	NEODYMIUM NITRATE, 99.99%	16454-60-7	438.36	99.99
5153	NEODYMIUM PERCHLORATE, CRYSTALLINE HYDRATE	13498-06-1	442.53	
528	NEODYMIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	17522-69-9	550.69	
A6333	PRASEODYMIUM ACETATE, 99%	14431-99-3	372.09	99
2225	PRASEODYMIUM ACETATE, 99.9%	14431-99-3	372.09	99.9
2229	PRASEODYMIUM CHLORIDE, 99.99%, HEPTAHYDRATE	10025-90-8	373.38	99.99
A6378	PRASEODYMIUM NITRATE, 99.9%	15878-77-0	435.02	99.9
2230	PRASEODYMIUM NITRATE, 99.99%	15878-77-0	435.02	99.99

# Rare Earth Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
529	PRASEODYMIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	13498-07-2	547.36	
A6714	SAMARIUM NITRATE, 99.9%	13759-83-6	444.48	99.9
2237	SAMARIUM NITRATE, 99.99%	13759-83-6	444.48	99.99
530	SAMARIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	13569-60-3	556.80	
5161	SCANDIUM ACETATE, 99.99%, HYDRATE	3804-23-7	222.09	99.99
3581	SCANDIUM CHLORIDE, HEXAHYDRATE, 99.9%	20662-14-0	259.41	99.9
5165	SCANDIUM CHLORIDE, HEXAHYDRATE, 99.99%	20662-14-0	259.41	99.99
3582	SCANDIUM NITRATE, HYDRATE, 99.9%	115906-70-2	230.97	99.9
5166	SCANDIUM NITRATE, HYDRATE, 99.99%	115906-70-2	230.97	99.99
518	SCANDIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	14066-50-8	451.42	
3540	SCANDIUM TRIFLUOROMETHANESULFONATE, 99%	144026-79-9	492.16	99
A7866	TERBIUM CHLORIDE, HEXAHYDRATE, 99.9%	13798-24-8	373.38	99.9
5172	TERBIUM CHLORIDE, HEXAHYDRATE, 99.99%	13798-24-8	373.38	99.99
5173	TERBIUM NITRATE, HEXAHYDRATE, 99.99%	13451-19-9	453.04	99.99
641	TERBIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	14014-09-6	565.37	
3584	YTTERBIUM ACETATE, HYDRATE, 99.9%	15280-58-7	350.17	99.9
A9102	YTTERBIUM CHLORIDE, HEXAHYDRATE, 99.9%	10035-01-5	387.50	99.9
2246	YTTERBIUM CHLORIDE, HEXAHYDRATE, 99.99%	10035-01-5	387.50	99.99
2485	YTTERBIUM NITRATE, PENTAHYDRATE, 99.9%	35725-34-9	449.13	99.9
2247	YTTERBIUM NITRATE, PENTAHYDRATE, 99.99%	35725-34-9	449.13	99.99
531	YTTERBIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	13498-08-3	579.49	
3498	YTTERBIUM TRIFLUOROACETATE	87863-62-5	512.09	99.9
2970	YTTRIUM ACETATE, TETRAHYDRATE, 99.9%	85949-60-6	338.11	99.9
5178	YTTRIUM ACETATE, TETRAHYDRATE, 99.99%	85949-60-6	338.11	99.99
2486	YTTRIUM CHLORIDE, 99.9%	10025-94-2	303.36	99.9
2249	YTTRIUM CHLORIDE, 99.99%	10025-94-2	303.36	99.99
2453	YTTRIUM NITRATE, 99.9%, 50% SOLUTION	13494-98-9	383.02	99.9
1216	YTTRIUM NITRATE, HEXAHYDRATE, 99.9%	13494-98-9	383.02	99.9
2250	YTTRIUM NITRATE, HEXAHYDRATE, 99.99%	13494-98-9	383.02	99.99
A9232	YTTRIUM NITRATE, HEXAHYDRATE, 99.999%	13494-98-9	383.02	99.999
1222	YTTRIUM OXALATE, REAGENT	13266-82-5	604.02	97
5183	YTTRIUM PERCHLORATE, CRYSTALLINE HYDRATE	14017-56-2	388.20	
532	YTTRIUM PERCHLORATE, HYDRATED, 50% SOLUTION, REAGENT	14017-56-2	495.37	
3480	YTTRIUM TRIFLUOROACETATE	304851-95-4	427.95	98

# Heavy Metal Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
867	CADMIUM ACETATE, DIHYDRATE, REAGENT	5743-04-4	266.52	98
A1320	CADMIUM BROMIDE, TETRAHYDRATE, REAGENT	13464-92-1	344.27	98
868	CADMIUM CHLORIDE, ANHYDROUS, REAGENT (ACS)	10108-64-2	183.32	99
869	CADMIUM CHLORIDE, HYDRATED, REAGENT (ACS)	7790-78-5	228.35	
870	CADMIUM IODIDE, REAGENT	7790-80-9	366.22	
871	CADMIUM NITRATE, TETRAHYDRATE, REAGENT (ACS)	10022-68-1	308.48	99
3722	CADMIUM PERCHLORATE, DEHYDRATED, REAGENT	13760-37-7	347.36	
265	CADMIUM PERCHLORATE, HEXAHYDRATE, REAGENT	10326-28-0	419.42	
873	CADMIUM SULFATE, ANHYDROUS, REAGENT (ACS)	10124-36-4	208.47	99
1150	CADMIUM SULFATE, HYDRATED, REAGENT (ACS)	7790-84-3	769.52	98
1697	CADMIUM, METAL, 20-60 MESH, GRANULAR	7440-43-9	112.41	
3787	CADMIUM, POWDER, 60 MESH	7440-43-9	112.41	
3614	CUPRIC CHLORIDE, ANHYDROUS	7447-39-4	134.45	97
901	CUPRIC NITRATE, HYDRATE, REAGENT (ACS)	19004-19-4	232.59	98
3794	CUPRIC PERCHLORATE, DEHYDRATED, REAGENT	13770-18-8	334.51	
38	CUPRIC PERCHLORATE, HYDRATED, REAGENT	10294-46-9	370.55	98
903	CUPRIC SULFATE, ANHYDROUS, REAGENT	7758-98-7	159.61	98
904	CUPROUS CHLORIDE, REAGENT (ACS)	7758-89-6	98.99	98
3613	CUPROUS IODIDE	7681-65-4	190.44	98
1073P	LEAD CHLORIDE, PURIFIED	7758-95-4	278.10	99
938	LEAD CHROMATE, REAGENT (ACS)	7758-97-6	323.18	98
A4179	LEAD NITRATE, 99.5%	10099-74-8	331.20	99.5
607	LEAD NITRATE, REAGENT (ACS)	10099-74-8	331.20	99
50	LEAD PERCHLORATE, SATURATED SOLUTION, REAGENT	13637-76-8	406.10	
49	LEAD PERCHLORATE, TRIHYDRATE, REAGENT (ACS)	13453-62-8	460.15	97
1166	LEAD SULFATE, REAGENT	7446-14-2	303.25	99
950	MERCURIC BROMIDE, REAGENT (ACS)	7789-47-1	360.40	
952	MERCURIC IODIDE, RED, REAGENT (ACS)	7774-29-0	454.40	99
5045	MERCURIC NITRATE, MONOHYDRATE, 99.999%	7783-34-8	342.62	99.999
613	MERCURIC NITRATE, MONOHYDRATE, REAGENT (ACS)	7783-34-8	342.62	98
2338	MERCURIC SULFATE SOLUTION, FOR DIGESTION			
614	MERCURIC SULFATE, REAGENT (ACS)	7783-35-9	296.65	98
957	MERCUROUS NITRATE, DIHYDRATE, REAGENT	14836-60-3	561.22	97
971	NICKEL AMMONIUM SULFATE, REAGENT	7785-20-8	395.00	98
A5317	NICKEL BROMIDE	7789-49-3	272.55	98
5316	NICKEL CHLORIDE, HEXAHYDRATE, REAGENT (ACS)	7791-20-0	237.72	97
973	NICKEL NITRATE, HEXAHYDRATE, REAGENT	13478-00-7	290.81	98
5317	NICKEL NITRATE, HEXAHYDRATE, REAGENT (ACS)	13478-00-7	290.81	98

## Heavy Metal Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
5155	NICKEL PERCHLORATE, DEHYDRATED, REAGENT	13637-71-3	311.70	
62	NICKEL PERCHLORATE, HEXAHYDRATE, REAGENT	13520-61-1	365.70	
697	NICKEL SULFATE, HEXAHYDRATE, REAGENT (ACS)	10101-97-0	262.84	98
562	STANNOUS CHLORIDE, DIHYDRATE, REAGENT (ACS)	10025-69-1	225.63	98
101	ZINC, AMALGAMATED	52374-36-4		

## Transition Metal Compounds

ITEM #	PRODUCT NAME	CAS#	FORMULA WEIGHT	% PURITY
3718	ALUMINUM PERCHLORATE, DEHYDRATED, REAGENT	14452-39-2	379.48	
2	ALUMINUM PERCHLORATE, HYDRATED, REAGENT	81029-06-3	487.48	
863	BISMUTH CHLORIDE, REAGENT (ACS)	7787-60-2	315.34	98
864	BISMUTH NITRATE PENTAHYDRATE, REAGENT (ACS)	10035-06-0	485.07	98
A1020	BISMUTHYL CHLORIDE, 99.99%	7787-59-9	260.43	99.99
357	BISMUTHYL PERCHLORATE MONOHYDRATE, REAGENT	54509-78-3	342.47	
5365	COBALT AMMONIUM SULFATE HEXAHYDRATE	13586-38-4	395.23	99
3481	COBALT BROMIDE, HEXAHYDRATE	13762-12-4	326.83	98
1383	COBALT CARBONATE, 99.5%	513-79-1	118.94	99.5
A2019	COBALT CHLORIDE, ANHYDROUS, 99%	7646-79-9	129.84	99
3793	COBALT PERCHLORATE, DEHYDRATED, REAGENT	13455-31-7	293.95	
36	COBALT PERCHLORATE, HEXAHYDRATE, REAGENT	13478-33-6	365.95	
3624	COBALT THIOCYANATE, ANHYDROUS	3017-60-5	175.10	99.9
603	CUPRIC CHLORIDE, DIHYDRATE, REAGENT (ACS)	10125-13-0	170.48	99
3524	CUPRIC TRIFLUOROMETHANESULFONATE, 98%	34946-82-2	361.68	98
666	CUPRIETHYLENEDIAMINE, SOLUTION, 1 M	14552-35-3	217.76	
40	FERRIC PERCHLORATE, HYDRATED, NON-YELLOW, REAGENT	55144-08-6	462.32	
39	FERRIC PERCHLORATE, HYDRATED, YELLOW, REAGENT	55144-08-6	462.32	
42	FERROUS PERCHLORATE, HYDRATED, REAGENT	13520-69-9	362.86	
1170	MANGANESE NITRATE SOLUTION, 50%, REAGENT	10377-66-9	178.95	
2334	MANGANESE OXALATE, DIHYDRATE	6556-16-7	178.99	99.5
57	MANGANESE PERCHLORATE, HYDRATED, REAGENT	15364-94-0	361.94	
290	SODIUM COBALTINITRITE, REAGENT (ACS)	14649-73-1	403.93	
1672	SODIUM MOLYBDATE ANHYDROUS, REAGENT	7631-95-0	205.91	99

## Transition Metal Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
1061	ZINC NITRATE HEXAHYDRATE, REAGENT	10196-18-6	297.48	99.8
5184	ZINC PERCHLORATE, DEHYDRATED, REAGENT	13637-61-1	336.35	
102	ZINC PERCHLORATE, HEXAHYDRATE, REAGENT	10025-64-6	372.38	
2995	ZINC PHOSPHATE, MONOBASIC, 50% SOLUTION	13598-37-3	259.37	
3550	ZINC TRIFLUOROMETHANESULFONATE, 98%	54010-75-2	363.51	98
280	ZINC PERCHLORATE, HYDRATED, REAGENT	12205-73-1	450.26	

## Silver & Precious Metal Compounds

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
615	SILVER ACETATE, PURIFIED	563-63-3	166.91	99
616	SILVER BROMIDE, PURIFIED	7785-23-1	187.78	
617	SILVER CARBONATE, REAGENT	534-16-7	275.75	
703	SILVER CHLORIDE, REAGENT	7783-90-6	143.32	98.5
84	SILVER IODATE, REAGENT	7783-97-3	282.80	
1190	SILVER IODIDE, REAGENT	7783-96-2	234.77	
378	SILVER NITRATE, REAGENT (ACS)	7761-88-8	169.89	99
3630	SILVER NITRITE	7783-99-5	153.88	98
86	SILVER PERCHLORATE, ANHYDROUS, REAGENT	7783-93-9	207.34	97
5089	SILVER PERCHLORATE, HYDRATED, 99.999%	14242-05-8	225.33	99.999
87	SILVER PERCHLORATE, HYDRATED, REAGENT	14242-05-8	225.33	98
618	SILVER SULFATE, REAGENT (ACS)	10294-26-5	311.80	98
5217	SILVER TRIFLUOROACETATE, 98%	2966-50-9	220.88	98



# ANALYTICAL REAGENTS & SOLUTIONS

GFS Chemicals manufactures and lists a great number of ACS and Reagent grade materials for use in research, analytical and manufacturing laboratories. Besides traditional ACS reagents, GFS Chemicals provides dyes, indicators, Karl Fischer Reagents, biochemically tested materials, and other common laboratory reagents. Our Trace Metal Grade Acids are among some of the purest in the world and are distilled using proprietary technology.

## ACS Reagents

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
833	ALUMINUM AMMONIUM SULFATE, DODECAHYDRATE, REAGENT (ACS)	7784-26-1	453.33
835	ALUMINUM CHLORIDE, HEXAHYDRATE, REAGENT	7784-13-6	241.43
6451	AMMONIUM CHLORIDE, LOW NITRATE, REAGENT (ACS)	12125-02-9	53.49
646	AMMONIUM NITRATE, REAGENT (ACS)	6484-52-2	80.04
715	AMMONIUM OXALATE, REAGENT (ACS)	6009-70-7	142.11
847	AMMONIUM SULFAMATE, REAGENT (ACS)	7773-06-0	114.11
848	AMMONIUM TARTRATE, REAGENT	3164-29-2	184.15
602	BARIUM CHLORIDE, DIHYDRATE, REAGENT (ACS)	10326-27-9	244.28
859	BARIUM SULFATE, REAGENT	7727-43-7	233.40
864	BISMUTH NITRATE, PENTAHYDRATE, REAGENT (ACS)	10035-06-0	485.07
13	CERIC AMMONIUM NITRATE, REAGENT (ACS)	16774-21-3	548.23
5485	HYDROXYLAMMONIUM SULFATE, REAGENT (ACS)	10039-54-0	164.15
5947	8-HYDROXYQUINOLINE, ANHYDROUS	134-31-6	203.21
609	LITHIUM CARBONATE, REAGENT (ACS)	554-13-2	73.89
610	LITHIUM METABORATE, ANHYDROUS, REAGENT (ACS)	13453-69-5	49.76
612	LITHIUM SULFATE, MONOHYDRATE, REAGENT (ACS)	10102-25-7	127.95
697	NICKEL SULFATE, HEXAHYDRATE, REAGENT (ACS)	10101-97-0	262.84
1178	POTASSIUM BITARTRATE, REAGENT (ACS)	868-14-4	188.18
987	POTASSIUM CHLORATE, REAGENT (ACS)	3811-04-9	122.55
794	POTASSIUM NITRITE, REAGENT (ACS)	7758-09-0	85.10
996	POTASSIUM OXALATE, MONOHYDRATE, REAGENT (ACS)	6487-48-5	184.24
618	SILVER SULFATE, REAGENT (ACS)	10294-26-5	311.80
1029	SODIUM CHLORATE, REAGENT (ACS)	7775-09-9	106.44
290	SODIUM COBALTINITRITE, REAGENT (ACS)	14649-73-1	403.93

# ACS Reagents

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
619	SODIUM FORMATE, REAGENT (ACS)	141-53-7	68.01
6581	SODIUM NITRATE, LOW CHLORIDE	7631-99-4	84.99
658	SODIUM NITRATE, REAGENT (ACS)	7631-99-4	84.99
559	SODIUM NITRITE, REAGENT (ACS)	7632-00-0	69.00
805	SODIUM TARTRATE, DIHYDRATE, REAGENT (ACS)	6106-24-7	230.08
806	SODIUM TETRABORATE, DECAHYDRATE, REAGENT (ACS)	1303-96-4	381.37
807	STRONTIUM CHLORIDE, HEXAHYDRATE, REAGENT (ACS)	10025-70-4	266.62
808	STRONTIUM NITRATE, REAGENT (ACS)	10042-76-98	211.63

## ACS/Reagent Grade Acids

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
<i>ACETIC ACID</i>			
1685	ACETIC ACID SOLUTION, 84%, REAGENT	64-19-7	60.05
2004	ACETIC ACID SOLUTION, 20% V/V	64-19-7	60.05
2005	ACETIC ACID SOLUTION, 30% V/V	64-19-7	60.05
2006	ACETIC ACID SOLUTION, 70%	64-19-7	60.05
2583	ACETIC ACID, SUPERIOR REAGENT (ACS)	64-19-7	60.05
<i>HYDROCHLORIC ACID</i>			
2586	HYDROCHLORIC ACID, 37%, SUPERIOR REAGENT (ACS)	7647-01-0	36.46
<i>NITRIC ACID</i>			
626	NITRIC ACID, REAGENT (ACS)	7697-37-2	63.01
2587	NITRIC ACID, SUPERIOR REAGENT (ACS)	7697-37-2	63.01
<i>PERCHLORIC ACID</i>			
2478	PERCHLORIC ACID, 40% REAGENT	7601-90-3	100.46
6601	PERCHLORIC ACID, 50%, REAGENT (ACS)	7601-90-3	100.46
2967	PERCHLORIC ACID, 60% SUPERIOR REAGENT (ACS)	7601-90-3	100.46
69	PERCHLORIC ACID, 60%, REAGENT (ACS)	7601-90-3	100.46
68	PERCHLORIC ACID, 68-72%, TECHNICAL	7601-90-3	100.46
67	PERCHLORIC ACID, 70% , VERITAS REDISTILLED	7601-90-3	100.46
2477	PERCHLORIC ACID, 70% SUPERIOR REAGENT (ACS)	7601-90-3	100.46
66	PERCHLORIC ACID, 70%, REAGENT (ACS)	7601-90-3	100.46
<i>PHOSPHORIC ACID</i>			
1589	PHOSPHORIC ACID, 85%, SUPERIOR REAGENT (ACS)	7664-38-2	98.00

# ACS/Reagent Grade Acids

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
<b>SULFURIC ACID</b>			
1264	SULFURIC ACID, REAGENT, FOR BABCOCK TEST	7664-93-9	98.09
1565	SULFURIC ACID, 70%, REAGENT	7664-93-9	98.09
1977	SULFURIC ACID, SOLUTION, 18 N	7664-93-9	98.09
2588	SULFURIC ACID, SUPERIOR REAGENT (ACS)	7664-93-9	98.09
2158	SULFURIC ACID, SOLUTION, 5.00 N	7664-93-9	98.09
9005	SULFURIC ACID, SOLUTION, 6 N	7664-93-9	98.09
<b>OTHER ACS/REAGENT GRADE ACIDS</b>			
2039	BORIC ACID SOLUTION, 5% W/V	10043-35-3	61.83
1332	BORIC ACID, REAGENT (ACS), POWDER	10043-35-3	61.83
2048	CITRIC ACID SOLUTION, 10% W/V	77-92-9	192.13
2585	FORMIC ACID, 88%, SUPERIOR REAGENT (ACS)	64-18-6	46.03
5949	FORMIC ACID, 98%	64-18-6	46.03
44	IODIC ACID, REAGENT (ACS)	7782-68-5	175.91
2091	OXALIC ACID SOLUTION, 10% W/V	6153-56-6	126.07
652	OXALIC ACID DIHYDRATE, REAGENT (ACS)	6153-56-6	126.07
2450	OXALIC ACID, ANHYDROUS, 98%	144-62-7	90.04
1277	OXALIC ACID DIHYDRATE, HIGH PURITY	6153-56-6	126.07
74	PERIODIC ACID, REAGENT (ACS)	10450-60-9	227.96
7402	PERIODIC ACID, SOLUTION, 50%	10450-60-9	227.96
98	SULFAMIC ACID, CERTIFIED, PRIMARY STANDARD	5329-14-6	97.10
1109	SULFUROUS ACID, 6%, REAGENT (ACS)	7782-99-2	82.08
2983	TRIFLUOROACETIC ACID, BIO-REFINED	76-05-1	114.02

# Trace Metal Grade Acids

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	GRADE
<b>ACETIC ACID</b>				
2589	ACETIC ACID, ENVIRONMENTAL GRADE	64-19-7	60.05	Enviro
546	ACETIC ACID, VERITAS REDISTILLED	64-19-7	60.05	PPB
1261	ACETIC ACID, VERITAS DOUBLE DISTILLED	64-19-7	60.05	PPT
<b>FORMIC ACID</b>				
2591	FORMIC ACID, 88% ENVIRONMENTAL GRADE	64-18-6	46.03	Enviro
1262	FORMIC ACID, 88%, VERITAS DOUBLE DISTILLED	64-18-6	46.03	PPB

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	GRADE
<b>HYDROCHLORIC ACID</b>				
2180	HYDROCHLORIC ACID, 32-38%. VERITAS REDISTILLED	7647-01-0	36.46	PPB
504	HYDROCHLORIC ACID, 6 M, VERITAS REDISTILLED	7647-01-0	36.46	PPB
7110	VERITAS TRACE HYDROCHLORIC ACID	7647-01-0	36.46	Low PPB
7210	VERITAS ULTIMATE HYDROCHLORIC ACID	7647-01-0	36.46	Low PPT
<b>NITRIC ACID</b>				
63	NITRIC ACID, 69%, VERITAS REDISTILLED	7697-37-2	63.01	PPB
621	NITRIC ACID, VERITAS DOUBLE DISTILLED	7697-37-2	63.01	PPT
7100	VERITAS TRACE NITRIC ACID	7697-37-2	63.01	Low PPB
7200	VERITAS ULTIMATE NITRIC ACID	7697-37-2	63.01	Low PPT
<b>PERCHLORIC ACID</b>				
67	PERCHLORIC ACID, 70%, VERITAS REDISTILLED	7601-90-3	100.46	PPB
230	PERCHLORIC ACID, 70%, VERITAS DOUBLE DISTILLED	7601-90-3	100.46	PPT
7140	VERITAS TRACE PERCHLORIC ACID	7601-90-3	100.46	Low PPB
7240	VERITAS ULTIMATE PERCHLORIC ACID	7601-90-3	100.46	Low PPT
<b>HYDROFLUORIC ACID</b>				
1229	HYDROFLUORIC ACID, VERITAS DOUBLE DISTILLED	7664-39-3	20.01	PPT
<b>SULFURIC ACID</b>				
7120	VERITAS TRACE SULFURIC ACID	7664-93-9	98.09	Low PPB
7220	VERITAS ULTIMATE SULFURIC ACID	7664-93-9	98.09	Low PPT
<b>OTHER TRACE METAL GRADE</b>				
2448	HYDROGEN PEROXIDE, 99.999%, 30-32% IN WATER	7722-84-1	34.02	
5359	PERIODIC ACID, 99.99+%	10450-60-9	227.96	
7290	VERITAS ULTIMATE TYPE I WATER	7732-18-5	18.02	Low PPT

## Organic Acids

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
<b>ANHYDRIDES</b>				
700	PHTHALIC ANHYDRIDE, REAGENT (ACS)	85-44-9	148.12	99
5588	4-(PHENYLETHYNYL)PHTHALIC ANHYDRIDE, 98%	119389-05-8	248.24	98
<b>OTHER ORGANIC ACIDS</b>				
3032	2-BUTYNOIC ACID, 98%	590-93-2	84.07	98
3113	10,12-DOCOSADIYNEOIC ACID, 98%	28393-02-4	362.49	98
3155	4,6-HEPTADECADIYNOIC ACID, 98%	84975-52-0	262.39	98
3167	6-HEPTYNOIC ACID, 96%	30964-00-2	126.16	96
3196	2-HEXYNOIC ACID, 96%	764-33-0	112.13	96

# Organic Acids

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT	% PURITY
3197	5-HEXYNOIC ACID, 96%	53293-00-8	112.13	96
3205	14-HYDROXY-10,12-TETRADECADIYNOIC ACID, 97%	86840-72-4	236.31	97
3233	6,8-NONADECADIYNOIC ACID, 98%	174063-97-9	290.45	98
3245	5,7-OCTADECADIYNOIC ACID, 97%	136667-54-4	276.42	97
3246	10,12-OCTADECADIYNOIC ACID, 95%	7333-25-7	276.42	95
3261	10,12-PENTACOSADIYNOIC ACID, 98%	66990-32-7	374.61	98
3272	2-PENTYNOIC ACID, 98%	5963-77-9	98.10	98
3316	10,12-TRICOSADIYNOIC ACID, 97%	66990-30-5	346.55	97
3409	5,7-TETRADECADIYNOIC ACID, 98%	140654-92-8	220.32	98
3446	10,12-HEPTACOSADIYNOIC ACID, 98%	67071-94-7	402.66	98
1588	CITRIC ACID, ANHYDROUS, LOW METALS GRADE	77-92-9	192.13	
3472	6,8-HENEICOSADIYNOIC ACID, 98%	174063-94-6	318.50	98
9277	10,12-HENEICOSADIYNOIC ACID, 98%	28393-00-2	318.50	98

# Bases

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
9782	AMMONIUM HYDROXIDE SOLUTION, 6 N	1336-21-6	35.05
2590	AMMONIUM HYDROXIDE , ENVIRONMENTAL GRADE	1336-21-6	35.05
2584	AMMONIUM HYDROXIDE, SUPERIOR REAGENT (ACS)	1336-21-6	35.05
2129	SODIUM HYDROXIDE SOLUTION, 25% W/W	1310-73-2	40.00
5609	SODIUM HYDROXIDE SOLUTION, 40% W/W	1310-73-2	40.00
2131	SODIUM HYDROXIDE SOLUTION, 50% W/W, REAGENT GRADE	1310-73-2	40.00
1579	SODIUM HYDROXIDE, SOLUTION, 10 N	1310-73-2	40.00
1551	SODIUM HYDROXIDE, SOLUTION, 5 N	1310-73-2	40.00
2262	TETRABUTYLAMMONIUM HYDROXIDE, 4 M AQUEOUS, ELECTROMETRIC GRADE	2052-49-5	259.48
2984	TETRABUTYLAMMONIUM HYDROXIDE, 40% AQUEOUS SOLUTION	2052-49-5	259.48
2520	TETRAETHYLAMMONIUM HYDROXIDE, 20% AQUEOUS SOLUTION	77-98-5	147.26
2528	TETRAPROPYLAMMONIUM HYDROXIDE, 1 M, AQUEOUS SOLUTION	4499-86-9	203.37

## Non-Aqueous Acids

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
2474	HYDROGEN CHLORIDE, 5-6 N, in ISOPROPYL ALCOHOL	7647-01-0	36.46
5586	HYDROGEN CHLORIDE, 4 M, in DIOXANE	7647-01-0	36.46
5653	HYDROGEN CHLORIDE, 2.5 M, in DENATURED ETHANOL	7647-01-0	36.46
71	PERCHLORIC ACID SOLUTION, 0.1 N in ACETIC ACID	7601-90-3	100.46

## Dyes, Stains & Indicators

ITEM #	PRODUCT NAME	CAS #	FORMULA WEIGHT
2093	1-(2-PYRIDYLAZO)-2-NAPHTHOL SOLUTION, 0.1%, in ETHYL ALCOHOL	85-85-8	249.26
2012	ALIZARIN RED S SOLUTION, 0.1% AQUEOUS	130-22-3	
2013	ALIZARIN YELLOW R SOLUTION, 0.01% AQUEOUS	2243-76-7	
2040	BROMCRESOL GREEN SOLUTION, 0.1% AQUEOUS	62625-32-5	720.02
9352	BROMCRESOL GREEN-METHYL RED MIXED INDICATOR SOLUTION in ETHYL ALCOHOL		
2041	BROMCRESOL PURPLE SOLUTION, 0.04% AQUEOUS	62625-30-3	562.22
2042	BROMPHENOL BLUE SOLUTION, 0.1% AQUEOUS	34725-61-6	691.97
2043	BROMTHYMOL BLUE SOLUTION, 0.04% AQUEOUS	34722-90-2	646.39
2045	CALMAGITE SOLUTION, 0.1% AQUEOUS	3147-14-6	358.38
5552	DICHLOROFLUORESCEIN SOLUTION, 1% in REAGENT ALCOHOL	76-54-0	401.20
2061	DIPHENYLAMINE INDICATOR, SOLUTION, 0.3% AQUEOUS	122-39-4	169.22
2065	FERRIC AMMONIUM SULFATE, SOLUTION	7783-83-7	482.20
2083	METHYL ORANGE SOLUTION, 0.05% AQUEOUS	547-58-0	327.34
2085	METHYL RED SOLUTION, 0.1% AQUEOUS	845-10-3	291.29
2081	METHYLENE BLUE SOLUTION, 0.05% AQUEOUS	7220-79-3	373.91
5946	METHYLENE BLUE, BIOREFINED	7220-79-3	373.91
2095	PHENOL RED SOLUTION, 0.04% AQUEOUS	34487-61-1	376.36
2094	PHENOLPHTHALEIN SOLUTION, 0.08%	77-09-8	318.33
726	PHENOLPHTHALEIN SOLUTION, 1%	77-09-8	318.33
2098	POTASSIUM CHROMATE, 63% W/V, INDICATOR SOLUTION	7789-00-6	194.20
1180	POTASSIUM CHROMATE, SOLUTION, 5%	7789-00-6	194.20
2161	THYMOL BLUE, SOLUTION, 0.04% AQUEOUS	62625-21-2	488.58
2170	XYLENOL ORANGE SOLUTION, 0.10% AQUEOUS	3618-43-7	760.60

# Volumetric Solutions

ITEM #	PRODUCT NAME
165	1,10-PHENANTHROLINE FERROUS SULFATE SOLUTION, 0.025 M in WATER
5638	ACID NEUTRALIZING POWDER, INDICATING
2405	AMMONIUM ACETATE SOLUTION, 10% AQUEOUS
3553	AMMONIUM HYDROXIDE SOLUTION, 1 N
1136	AMMONIUM HYDROXIDE SOLUTION, 10% V/V
2024	AMMONIUM MOLYBDATE SOLUTION, 4%
2027	AMMONIUM OXALATE SOLUTION, 5% W/V
1138	AMMONIUM THIOCYANATE SOLUTION, 0.1 N
2031	AMMONIUM THIOCYANATE SOLUTION, 10% W/V
2032	ANTIMONY POTASSIUM TARTRATE, SOLUTION
2034	BARIUM CHLORIDE SOLUTION, 0.1 M
1143	BARIUM CHLORIDE SOLUTION, 0.5 M (12%)
1860	BARIUM CHLORIDE SOLUTION, 1.0 N
5000	BARIUM PERCHLORATE, 0.01 N, AQUEOUS SOLUTION
2387	BORIC ACID, 4% ABSORBANT
1148	CALCIUM CHLORIDE, SOLUTION, 2.75%
5643	CERIC AMMONIUM SULFATE, SOLUTION, 0.1 N
5644	CERIC AMMONIUM SULFATE, SOLUTION, 0.2 N
1574	CERIC NITRATE, SOLUTION, 1.0 N
1575	CERIC NITRATE, SOLUTION, 1.5 N
1983	CERIC SULFATE, SOLUTION, 0.4 N
5369	CERIC SULFATE, SOLUTION, 0.002 N
1284	CERIC SULFATE, SOLUTION, 0.0179 N
26	CERIC SULFATE, SOLUTION, 0.1 N
716	CERIC SULFATE, SOLUTION, 0.2500 N
25	CERIC SULFATE, SOLUTION, 0.5 N
1991	CHLORIDE COLOR REAGENT, MERCURIC THIOCYANATE 0.06% SOLUTION
2054	CUPRIC SULFATE SOLUTION, 0.01 M
2053	CUPRIC SULFATE SOLUTION, 5% W/V
6661	CUPRIETHYLENEDIAMINE SOLUTION, 0.5 M
666	CUPRIETHYLENEDIAMINE SOLUTION, 1 M
1152	DISODIUM DIHYDROGEN ETHYLENEDIAMINETETRAACETATE SOLUTION, 0.01 M
1553	DISODIUM DIHYDROGEN ETHYLENEDIAMINETETRAACETATE SOLUTION, 0.0575 M
1151	DISODIUM DIHYDROGEN ETHYLENEDIAMINETETRAACETATE SOLUTION, 0.05 M
720	DISODIUM DIHYDROGEN ETHYLENEDIAMINETETRAACETATE SOLUTION, 0.1 M
2066	FERRIC CHLORIDE SOLUTION, 10% W/V
2068	FERRIC NITRATE SOLUTION, 20% W/V
5533	FORMALIN, 10% NEUTRAL, BUFFERED

# Volumetric Solutions

ITEM #	PRODUCT NAME
2171	HYDROCHLORIC ACID, SOLUTION, 6.0 N
1161	HYDROCHLORIC ACID, SOLUTION, 0.01 N
2535	HYDROCHLORIC ACID, SOLUTION, 0.02 N
9318	HYDROCHLORIC ACID, SOLUTION, 0.025 N
2071	HYDROCHLORIC ACID, SOLUTION, 0.05 N
722	HYDROCHLORIC ACID, SOLUTION, 0.1 N
3578	HYDROCHLORIC ACID, SOLUTION, 0.1 N, in ISOPROPYL ALCOHOL
2330	HYDROCHLORIC ACID, SOLUTION, 0.2 N
1162	HYDROCHLORIC ACID, SOLUTION, 0.5 N
382	HYDROCHLORIC ACID, SOLUTION, 1.0 N
2305	HYDROCHLORIC ACID, SOLUTION, 10% V/V
1572	HYDROCHLORIC ACID, SOLUTION, 2 N
9321	HYDROGEN PEROXIDE SOLUTION, 3%
1083	HYDROXYLAMMONIUM CHLORIDE SOLUTION, 10% AQUEOUS
1578	HYDROXYLAMMONIUM CHLORIDE, REAGENT (ACS), LOW MERCURY
1164	IODINE, SOLUTION, 0.1 N
2073	IODINE, SOLUTION, 0.5 N
1163	IODINE, SOLUTION, 1 N
1591	LANTHANUM CHLORIDE, SOLUTION, 10%
2075	LEAD ACETATE, 10% SOLUTION
2076	LEAD PERCHLORATE SOLUTION, 0.1 M
2160	L-TARTARIC ACID SOLUTION, 10% W/V
9171	MERCURIC NITRATE SOLUTION, 0.01 N
2080	MERCURIC NITRATE SOLUTION, 0.1 N
9248	MERCUROUS NITRATE, 10% SOLUTION, in 10% NITRIC ACID
969	NESSLER REAGENT, MERCURIC POTASSIUM IODIDE, SOLUTION
1176	NITRIC ACID, SOLUTION, 1.0 N
1280	NITRIC ACID, SOLUTION, 10% W/W
1278	NITRIC ACID, SOLUTION, 15% W/W
1677	PERCHLORIC ACID SOLUTION, 0.1 N, AQUEOUS
3752	PERCHLORIC ACID, 10% W/W
2286	PHENYLARSINE OXIDE, SOLUTION, 0.00564 N
2270	POTASSIUM BROMATE-BROMIDE, SOLUTION, 0.1 N
2546	POTASSIUM BROMATE-BROMIDE, SOLUTION, 0.2 N
384	POTASSIUM CHLORIDE, SOLUTION, 1 N
9328	POTASSIUM CHLORIDE, SOLUTION, 3 M
1179	POTASSIUM CHLORIDE, SOLUTION, 4 M
9149	POTASSIUM CHLORIDE, SOLUTION, 4 M, SATURATED WITH SILVER CHLORIDE



# Volumetric Solutions

ITEM #	PRODUCT NAME
1563	POTASSIUM DICHROMATE, 0.025 N, SOLUTION
730	POTASSIUM DICHROMATE, 0.1 N, SOLUTION
3571	POTASSIUM DICHROMATE, 0.5 N, SOLUTION
2100	POTASSIUM FERRICYANIDE, 10% W/V, AQUEOUS SOLUTION
2101	POTASSIUM FERROCYANIDE, SOLUTION, 10% W/V
3572	POTASSIUM HYDROXIDE SOLUTION, 0.01 N, in ISOPROPANOL
1972	POTASSIUM HYDROXIDE SOLUTION, 0.1 N, in ISOPROPANOL
1984	POTASSIUM HYDROXIDE SOLUTION, 0.01 N, in METHANOL
2475	POTASSIUM HYDROXIDE SOLUTION, 0.05 N, in METHANOL
1182	POTASSIUM HYDROXIDE SOLUTION, 0.1 N
1674	POTASSIUM HYDROXIDE SOLUTION, 0.1 N, in METHANOL
1183	POTASSIUM HYDROXIDE SOLUTION, 0.5 N
1184	POTASSIUM HYDROXIDE SOLUTION, 1 N
2188	POTASSIUM HYDROXIDE SOLUTION, 2 N
9055	POTASSIUM HYDROXIDE, 0.02 N, in ISOPROPANOL
1648	POTASSIUM IODATE, SOLUTION, 0.1 N (0.025 mol/L) TITRANT
1185	POTASSIUM IODATE, SOLUTION, 0.1 N, (0.0167 mol/L) IODIMETRIC STANDARD
1564	POTASSIUM IODATE-IODIDE, SOLUTION, 0.1 N
2269	POTASSIUM IODATE-IODIDE, SOLUTION, 0.5 N
2191	POTASSIUM IODIDE, SOLUTION, 10% W/V
2274	POTASSIUM IODIDE, SOLUTION, 20%
2102	POTASSIUM IODIDE, SOLUTION, 5% W/V
1186	POTASSIUM PERMANGANATE, SOLUTION, 0.1 N
9004	POTASSIUM PERMANGANATE, SOLUTION, 0.891g/L
1861	POTASSIUM PERMANGANATE, SOLUTION, 1.0 N
9370	POTASSIUM THIOCYANATE, SOLUTION, 0.1 N
9795	POTASSIUM THIOCYANATE, SOLUTION, 10% W/V
2103	POTASSIUM THIOCYANATE, SOLUTION, 5% W/V
2187	SILVER NITRATE, SOLUTION, 10% W/V
3514	SILVER NITRATE, SOLUTION, 0.0141 N
2106	SILVER NITRATE, SOLUTION, 0.02 N
5584	SILVER NITRATE, SOLUTION, 0.02 N in ISOPROPYL ALCOHOL
1285	SILVER NITRATE, SOLUTION, 0.05 N
733	SILVER NITRATE, SOLUTION, 0.10 N
2107	SILVER NITRATE, SOLUTION, 0.141 N
1228	SILVER NITRATE, SOLUTION, 0.153 N
9283	SILVER NITRATE, SOLUTION, 0.20 N
2108	SILVER NITRATE, SOLUTION, 0.5 N

# Volumetric Solutions

ITEM #	PRODUCT NAME
1675	SILVER NITRATE, SOLUTION, 1.0 N
9064	SODIUM ACETATE, 0.1 N, in ACETIC ACID
1542	SODIUM ACETATE, SOLUTION, 20%, in WATER
2111	SODIUM BICARBONATE, SOLUTION 0.1 M
2114	SODIUM BROMIDE SOLUTION, 10% W/V
2116	SODIUM CARBONATE SOLUTION, 5% W/V
9837	SODIUM CARBONATE, SOLUTION, 0.02 N
2119	SODIUM CARBONATE, SOLUTION, 1.0 N
5755	SODIUM DIETHYLENETRIAMINEPENTAACETATE, 40% AQUEOUS SOLUTION
2128	SODIUM FLUORIDE, SOLUTION, 0.1 M
1989	SODIUM HYDROXIDE SOLUTION, 10%
2133	SODIUM HYDROXIDE, SOLUTION, 0.02 N
2172	SODIUM HYDROXIDE, SOLUTION, 0.05 N
1191	SODIUM HYDROXIDE, SOLUTION, 0.1 N
2291	SODIUM HYDROXIDE, SOLUTION, 0.1 N, in ETHANOL
2198	SODIUM HYDROXIDE, SOLUTION, 0.2 N
1192	SODIUM HYDROXIDE, SOLUTION, 0.5 N
1193	SODIUM HYDROXIDE, SOLUTION, 1.0 N
1573	SODIUM HYDROXIDE, SOLUTION, 2 N
5285	SODIUM HYPOCHLORITE SOLUTION, 10-13% AVAILABLE CHLORINE
2763	SODIUM HYPOCHLORITE SOLUTION, 5% AVAILABLE CHLORINE, REAGENT (ACS)
2137	SODIUM NITRATE, SOLUTION, 5 M
2139	SODIUM NITRITE, SOLUTION, 0.1 M
5920	SODIUM PERCHLORATE ELECTROLYTE, SATURATED in GLACIAL ACETIC ACID
5524	SODIUM SULFITE, ZERO DISSOLVED OXYGEN SOLUTION
2145	SODIUM THIOSULFATE, SOLUTION, 0.1 N
1559	SODIUM THIOSULFATE, SOLUTION, 0.01 N
9226	SODIUM THIOSULFATE, SOLUTION, 0.025 N
2146	SODIUM THIOSULFATE, SOLUTION, 0.05 N
736	SODIUM THIOSULFATE, SOLUTION, 0.1 N
9271	SODIUM THIOSULFATE, SOLUTION, 0.282 N
2177	SODIUM THIOSULFATE, SOLUTION, 0.5 N
1195	SODIUM THIOSULFATE, SOLUTION, 1.0 N
2148	STANNOUS CHLORIDE, 10% W/V, SOLUTION
2149	STANNOUS CHLORIDE, 40%, SOLUTION
2150	STANNOUS CHLORIDE, REAGENT I, SOLUTION
2157	SULFURIC ACID SOLUTION, 10% W/V
2173	SULFURIC ACID, 37%, SOLUTION

# Volumetric Solutions

ITEM #	PRODUCT NAME
1199	SULFURIC ACID SOLUTION, 0.1 N
2255	SULFURIC ACID, 0.25 N SOLUTION
1200	SULFURIC ACID, 0.5 N SOLUTION
1201	SULFURIC ACID, 1 N SOLUTION
2911	SULFURIC ACID SOLUTION, 20% W/V
2790	TRIETHANOLAMINE, 0.2 N, AQUEOUS SOLUTION
9053	TRIETHANOLAMINE, 0.5 N, AQUEOUS SOLUTION

## pH Buffers

ITEM #	PRODUCT NAME
2325	BUFFER SOLUTION, pH 1.00
1632	BUFFER SOLUTION, pH 2.00
1633	BUFFER SOLUTION, pH 3.00
1634	BUFFER SOLUTION, pH 4.00, (Color Coded Red)
680	BUFFER SOLUTION, pH 4.00
1635	BUFFER SOLUTION, pH 5.00
1636	BUFFER SOLUTION, pH 5.50
1637	BUFFER SOLUTION, pH 6.00
1638	BUFFER SOLUTION, pH 6.86
681	BUFFER SOLUTION, pH 7.00
1639	BUFFER SOLUTION, pH 7.00, (Color Coded Yellow)
1640	BUFFER SOLUTION, pH 7.00, (Color Coded Green)
2335	BUFFER CONCENTRATE, pH 7.00
1642	BUFFER SOLUTION, pH 8.00
1643	BUFFER SOLUTION, pH 9.00
1644	BUFFER SOLUTION, pH 9.18
682	BUFFER SOLUTION, pH 10.00
1645	BUFFER SOLUTION, pH 10.00 (Color Coded Blue)
2548	BUFFER SOLUTION, pH 11.00
1647	BUFFER SOLUTION, pH 12.00
2176	BUFFER SOLUTION, pH 12.45
2549	BUFFER pH 4, 7, 10 KIT

# Conductivity Standards

ITEM #	PRODUCT NAME
9477	CONDUCTIVITY STANDARD 84 $\mu\text{S}/\text{cm}$
9307	CONDUCTIVITY STANDARD 100 $\mu\text{S}/\text{cm}$
9245	CONDUCTIVITY STANDARD 147 $\mu\text{S}/\text{cm}$
9376	CONDUCTIVITY STANDARD 400 $\mu\text{S}/\text{cm}$
9413	CONDUCTIVITY STANDARD 1,000 $\mu\text{S}/\text{cm}$
2174	CONDUCTIVITY STANDARD 1,413 $\mu\text{S}/\text{cm}$
9414	CONDUCTIVITY STANDARD 10,000 $\mu\text{S}/\text{cm}$
3747	CONDUCTIVITY STANDARD 12,880 $\mu\text{S}/\text{cm}$
2381	CONDUCTIVITY STANDARD 25,000 $\mu\text{S}/\text{cm}$
9205	CONDUCTIVITY STANDARD 50,000 $\mu\text{S}/\text{cm}$
9357	CONDUCTIVITY STANDARD 100,000 $\mu\text{S}/\text{cm}$

## Karl Fischer Reagents & Standards



GFS Chemicals manufactures one of the largest selections of Karl Fischer reagents on the market and has the internal technical expertise to meet your needs. From volumetric and coulometric Karl Fischer reagents to water standards, GFS Karl Fischer Reagents are on hand and available to ship. GFS Chemicals offers both pyridine and pyridine-free solutions. Our Karl Fischer coulometric reagents have a water capacity, in excess of 1,000 mg of water/100 mL charge.

ITEM #	PRODUCT NAME
<b>ONE-COMPONENT TITRANT</b>	
1600	5 mg/mL 1-COMPONENT, WATERMARK KARL FISCHER TITRANT, PYRIDINE-FREE
1601	2 mg/mL 1-COMPONENT, WATERMARK KARL FISCHER TITRANT, PYRIDINE-FREE
1884	1 mg/mL 1-COMPONENT, WATERMARK KARL FISCHER REAGENT, PYRIDINE-FREE
1893	5 mg/mL 1-COMPONENT, NON-HAZ, WATERMARK KARL FISCHER TITRANT, PYRIDINE-FREE
1894	2 mg/mL 1-COMPONENT, NON-HAZ, WATERMARK KARL FISCHER TITRANT, PYRIDINE-FREE
1620	5 mg/mL TITRANT, PYRIDINE BASED, 1-COMPONENT

# Karl Fischer Reagents & Standards

ITEM #	PRODUCT NAME
<b>TWO-COMPONENT TITRANT</b>	
1616	5 mg/mL 2-COMPONENT TITRANT, IN METHANOL, WATERMARK KARL FISCHER REAGENT, PYRIDINE-FREE
1604	5 mg/mL, 2-COMPONENT TITRANT, STABLE, NON-HYGROSCOPIC WATERMARK KARL FISCHER REAGENT, PYRIDINE-FREE
1603	2 mg/mL, 2-COMPONENT TITRANT, STABLE, NON-HYGROSCOPIC WATERMARK KARL FISCHER REAGENT, PYRIDINE-FREE
1602	1 mg/mL, 2-COMPONENT TITRANT, STABLE, NON-HYGROSCOPIC WATERMARK KARL FISCHER, PYRIDINE-FREE
1970	0.5 mg/mL, 2-COMPONENT TITRANT, STABLE, NON-HYGROSCOPIC WATERMARK KARL FISCHER REAGENT, PYRIDINE-FREE
<b>ONE-COMPONENT SOLVENT</b>	
1885	METHANOL PRIME, WATERMARK KARL FISCHER SOLVENT, FOR FASTER TITRATIONS
3569	METHYL ALCOHOL, ANHYDROUS, WATERMARK KARL FISCHER REAGENT
2978	SOLVENT FOR OILS, ONE-COMPONENT, WATERMARK KARL FISCHER REAGENT
5322	ALDEHYDES AND KETONES SOLVENT, 1-COMPONENT, WATERMARK KARL FISCHER REAGENT
<b>TWO-COMPONENT SOLVENT</b>	
1609	METHANOL-FREE, WATERMARK KARL FISCHER SOLVENT, 1 & 2 COMPONENT SUITABLE FOR ALDEHYDES & KETONES
1610	GENERAL PURPOSE, WATERMARK KARL FISCHER SOLVENT, 1 & 2 COMPONENT SUITABLE
2991	SOLVENT FOR OILS, TWO-COMPONENT, WATERMARK KARL FISCHER REAGENT
<b>BUFFERING REAGENTS</b>	
1615	BUFFER SOLUTION, WATERMARK KARL FISCHER REAGENT
1973	IMIDAZOLE, ACS REAGENT
673	BENZOIC ACID, ACS REAGENT
799	SALICYLIC ACID, ACS REAGENT
2411	PROPIONIC ACID, ACS REAGENT
<b>COULOMETRIC ANOLYTES</b>	
1671	VESSEL SOLUTION, DIAPHRAGMLESS, CHLOROFORM-FREE, WATERMARK COULOMETRIC KARL FISCHER REAGENT
1612	ANOLYTE VESSEL SOLUTION, PYRIDINE-FREE, WATERMARK COULOMETRIC KARL FISCHER REAGENT
1619	ANOLYTE VESSEL SOLUTION, FOR KETONES AND ALDEHYDES, WATERMARK COULOMETRIC KARL FISCHER REAGENT
1607	ANOLYTE VESSEL SOLUTION, BIODIESEL, NON-POLAR AND OIL, WATERMARK COULOMETRIC KARL FISCHER REAGENT

# Karl Fischer Reagents & Standards

ITEM #	PRODUCT NAME
5202	ANOLYTE VESSEL SOLUTION, FOR OILS, WATERMARK COULOMETRIC KARL FISCHER REAGENT
1889	VESSEL SOLUTION FOR OVEN APPLICATIONS, WATERMARK COULOMETRIC KARL FISCHER REAGENT
5605	REAGENT KIT FOR OILS, WATERMARK COULOMETRIC KARL FISCHER REAGENT 8 x 100mL of 5202 and 8 x 5 mL 2321 in sealed ampoules
<b>COULOMETRIC CATHOLYTES</b>	
2321	GENERATOR SOLUTION, UNIVERSAL, WATERMARK COULOMETRIC KARL FISCHER REAGENT
1613	GENERATOR SOLUTION, PYRIDINE-FREE, WATERMARK COULOMETRIC KARL FISCHER REAGENT
<b>WATER STANDARDS</b>	
2303	10.0 mg/g, WATERMARK KF WATER STANDARD, 10,000 ppm
2304	5.0 mg/g, WATERMARK KF WATER STANDARD, 5,000 ppm
2302	1.0 mg/g, WATERMARK KF WATER STANDARD, 1,000 ppm
3493	0.50 mg/g, WATERMARK KF WATER STANDARD, 500 ppm
2301	0.10 mg/g, WATERMARK KF WATER STANDARD, 100 ppm
2311	0.05 mg/g, WATERMARK KF WATER STANDARD, 50 ppm
1617	5.0 mg/mL, WATERMARK KF WATER STANDARD
5707	2.0 mg/mL, WATERMARK KF WATER STANDARD
1618	1.0 mg/mL, WATERMARK KF WATER STANDARD
2196	0.10 mg/mL, WATERMARK KF WATER STANDARD
2385	POTASSIUM CITRATE, WATERMARK KF WATER STANDARD,
805	SODIUM TARTRATE, DIHYDRATE, ACS REAGENT, WATER 15.61 - 15.71 %
<b>SOLUBILIZERS</b>	
1093	FORMAMIDE, ACS REAGENT
1593	n-PROPYL ALCOHOL, ACS REAGENT
3482	1-DECANOL, 99%
1059	XYLENES, ACS REAGENT
1052	TOLUENE, ACS REAGENT
3777	CHLOROFORM, ACS REAGENT, ALCOHOL STABILIZED
2394	CHLOROFORM, ACS REAGENT, HYDROCARBON STABILIZED
1621	DILUENT
<b>DESICCANTS</b>	
1986	SILICA GEL, w/30% INDICATING BEADS, 3-10 MESH
1067	MOLECULAR SIEVES, 13x, 8-12 MESH BEADS
2715	MOLECULAR SIEVES, 13x, 4-8 MESH BEADS
963	MOLECULAR SIEVES, 3Å, 8-12 MESH BEADS
2709	MOLECULAR SIEVES, 3Å, 4-8 MESH BEADS

# Karl Fischer Reagents & Standards

ITEM #	PRODUCT NAME
<i>KF ACCESSORIES</i>	
78056	5 mL DISPOSABLE SYRINGE, 100/pk
78057	10 mL DISPOSABLE SYRINGE, 100/pk
78054	0.5 mL GAS TIGHT SYRINGE, PTFE LUER LOCK, NO NEEDLE
78053	1mL GAS TIGHT SYRINGE, PTFE LUER LOCK, NO NEEDLE
78051	5 mL GAS TIGHT SYRINGE, PTFE LUER LOCK, NO NEEDLE
78052	10 mL GAS TIGHT SYRINGE, PTFE LUER LOCK, NO NEEDLE
78058	DISPOSABLE NEEDLE, Air-Tite, 3", 100/pk
78129	DISPOSABLE NEEDLE, Air-tite, 4", 100/pk
78067	GLASS WOOL, 50 g
78091	WEIGH FUNNEL
78641	1" STIR BAR
78062	NITRILE GLOVES, 100/pk, Size L
78065	KIMWIPES, 280/pk

## Organic Halogen Reagent

ITEM #	PRODUCT NAME
5005	ORGANIC HALOGEN REAGENT, (Sodium Biphenyl Solution)



## Spectroscopy Standards

GFS Chemicals offers a long line of reference standards such as AA/ICP metal solutions, UV/VIS standards and much more for water/wastewater, environmental, industrial, soil, petroleum, food, pharmaceutical and various manufacturing applications.

ITEM #	PRODUCT NAME
<b>AA STANDARDS</b>	
740	BARIUM, 1,000 PPM, STANDARD SOLUTION
741	BORON, 1,000 PPM, STANDARD SOLUTION
743	CADMIUM, 1,000 PPM, STANDARD SOLUTION
744	CALCIUM, 1,000 PPM, STANDARD SOLUTION
747	CHROMIUM, 1,000 PPM, STANDARD SOLUTION
1544	COPPER, 2 PPM, STANDARD SOLUTION
2406	COPPER, 5 PPM, STANDARD SOLUTION
542	COPPER, 10 PPM, STANDARD SOLUTION
543	COPPER, 1,000 PPM, STANDARD SOLUTION
1085	IRON, 1 PPM, STANDARD SOLUTION
544	IRON, 10 PPM, STANDARD SOLUTION
545	IRON, 1,000 PPM, STANDARD SOLUTION
750	LEAD, 1,000 PPM, STANDARD SOLUTION
751	LITHIUM, 1,000 PPM, STANDARD SOLUTION
752	MAGNESIUM, 1,000 PPM, STANDARD SOLUTION
753	MANGANESE, 1,000 PPM, STANDARD SOLUTION
754	MERCURY, 1,000 PPM, STANDARD SOLUTION
755	NICKEL, 1,000 PPM, STANDARD SOLUTION
759	POTASSIUM, 1,000 PPM, STANDARD SOLUTION
760	SILVER, 1,000 PPM, STANDARD SOLUTION
761	SODIUM, 1,000 PPM, STANDARD SOLUTION
762	STRONTIUM, 1,000 PPM, STANDARD SOLUTION
764	TIN, 1,000 PPM, STANDARD SOLUTION
766	ZINC, 1,000 PPM, STANDARD SOLUTION
<b>ICP STANDARDS</b>	
1700	ALUMINUM, 1,000 PPM, ICP STANDARD SOLUTION, in HYDROCHLORIC ACID
1702	ANTIMONY, 1,000 PPM, ICP STANDARD SOLUTION
1704	ARSENIC, 1,000 PPM, ICP STANDARD SOLUTION
1706	BARIUM, 1,000 PPM, ICP STANDARD SOLUTION
1708	BERYLLIUM, 1,000 PPM, ICP STANDARD SOLUTION
1712	BORON, 1,000 PPM, ICP STANDARD SOLUTION

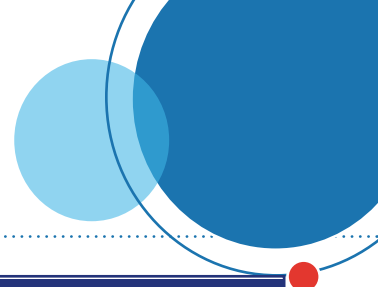


# Spectroscopy Standards

ITEM #	PRODUCT NAME
1714	CADMIUM, 1,000 PPM, ICP STANDARD SOLUTION
1716	CALCIUM, 1,000 PPM, ICP STANDARD SOLUTION
1722	CESIUM, 1,000 PPM, ICP STANDARD SOLUTION
1974	CHROMIUM, 1,000 PPM, ICP STANDARD SOLUTION
1724	CHROMIUM, 1,000 PPM, ICP STANDARD SOLUTION, in HYDROCHLORIC ACID
1726	COBALT, 1,000 PPM, ICP STANDARD SOLUTION
1728	COPPER, 1,000 PPM, ICP STANDARD SOLUTION
1732	ERBIUM, 1,000 PPM, ICP STANDARD SOLUTION
1734	EUROPIUM, 1,000 PPM, ICP STANDARD SOLUTION
1738	GALLIUM, 1,000 PPM, ICP STANDARD SOLUTION
1742	GOLD, 1,000 PPM, ICP STANDARD SOLUTION
1748	INDIUM, 1,000 PPM, ICP STANDARD SOLUTION
1750	IRIDIUM, 1,000 PPM, ICP STANDARD SOLUTION
1752	IRON, 1,000 PPM, ICP STANDARD SOLUTION
1756	LEAD, 1,000 PPM, ICP STANDARD SOLUTION
1762	MAGNESIUM, 1,000 PPM, ICP STANDARD SOLUTION
1764	MANGANESE, 1,000 PPM, ICP STANDARD SOLUTION
1766	MERCURY, 1,000 PPM, ICP STANDARD SOLUTION
1770	NEODYMIUM, 1,000 PPM, ICP STANDARD SOLUTION
1772	NICKEL, 1,000 PPM, ICP STANDARD SOLUTION
1777	PALLADIUM, 1,000 PPM, ICP STANDARD SOLUTION
1779	PHOSPHORUS, 1,000 PPM, ICP STANDARD SOLUTION
1783	POTASSIUM, 1,000 PPM, ICP STANDARD SOLUTION
1785	PRASEODYMIUM, 1,000 PPM, ICP STANDARD SOLUTION
1787	RHENIUM, 1,000 PPM, ICP STANDARD SOLUTION
1797	SCANDIUM, 1,000 PPM, ICP STANDARD SOLUTION
1799	SELENIUM, 1,000 PPM, ICP STANDARD SOLUTION
1803	SILVER, 1,000 PPM, ICP STANDARD SOLUTION
1805	SODIUM, 1,000 PPM, ICP STANDARD SOLUTION
1807	STRONTIUM, 1,000 PPM, ICP STANDARD SOLUTION
1809	SULFUR, 1,000 PPM, ICP STANDARD SOLUTION
1817	THALLIUM, 1,000 PPM, ICP STANDARD SOLUTION
1823	TIN, 1,000 PPM, ICP STANDARD SOLUTION
1829	URANIUM, 1,000 PPM, ICP STANDARD SOLUTION
1831	VANADIUM, 1,000 PPM, ICP STANDARD SOLUTION
1835	YTTRIUM, 1,000 PPM, ICP STANDARD SOLUTION
1837	ZINC, 1,000 PPM, ICP STANDARD SOLUTION
1839	ZIRCONIUM, 1,000 PPM, ICP STANDARD SOLUTION

# Spectroscopy Standards

ITEM #	PRODUCT NAME
<b>IC STANDARDS</b>	
3753	ACETATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3754	BROMATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3755	BROMIDE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3756	CHLORATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3757	CHLORIDE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3758	CHLORITE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3759	CHROMATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
9030	CYANIDE, 1,000 PPM, ION STANDARD
9319	FLUORIDE, 1 PPM, STANDARD SOLUTION, PREMIXED WITH TISAB
3761	FLUORIDE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3762	FORMATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3763	IODIDE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3764	MOLYBDATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3765	NITRATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3766	NITRITE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
2323	NITROGEN, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3767	OXALATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3768	PERCHLORATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3769	PHOSPHATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3770	SILICA, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
3771	SULFATE, 1,000 PPM, ION CHROMATOGRAPHY STANDARD SOLUTION
<b>ANION STANDARDS</b>	
738	AMMONIUM, 1,000 PPM, STANDARD SOLUTION
741	BROMIDE, 1,000 PPM, STANDARD SOLUTION
746	CHLORIDE, 1,000 PPM, STANDARD SOLUTION
9320	FLUORIDE, 10 PPM, STANDARD SOLUTION, PREMIXED WITH TISAB (Color- Coded Orange)
9822	FLUORIDE, 100 PPM, STANDARD SOLUTION
2070	FLUORIDE, 1,000 PPM, STANDARD SOLUTION
756	NITRATE, 1,000 PPM, ION STANDARD SOLUTION
757	PERCHLORATE, 1,000 PPM, ION STANDARD SOLUTION
758	PHOSPHATE, 1,000 PPM, ION STANDARD SOLUTION
763	SULFATE, 1,000 PPM, STANDARD SOLUTION
<b>SPECTROPHOTOMETER STANDARDS</b>	
9498	COLOR STANDARD SOLUTION, APHA 10
9502	COLOR STANDARD SOLUTION, APHA 50
9033	COLOR STANDARD SOLUTION, APHA 100
9418	COLOR STANDARD SOLUTION, APHA 250



ITEM #	PRODUCT NAME
2051	COLOR STANDARD SOLUTION, APHA 500
8445	IN-SPEC TRANSMITTANCE STANDARD, 20%
8444	IN-SPEC TRANSMITTANCE STANDARD, 40%
8443	IN-SPEC TRANSMITTANCE STANDARD, 60%
8446	IN-SPEC TRANSMITTANCE LINEARITY KIT
8442	IN-SPEC TRANSMITTANCE STANDARD, 80%
8475	WATER, 100% T
8301	IN-SPEC UV STANDARD #1, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8302	IN-SPEC UV STANDARD #2, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8303	IN-SPEC UV STANDARD #3, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8304	IN-SPEC UV STANDARD #4, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8305	IN-SPEC UV STANDARD #5, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8306	IN-SPEC UV STANDARD #6, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8307	IN-SPEC UV STANDARD #7, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8308	IN-SPEC UV STANDARD #8, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8309	IN-SPEC UV STANDARD #20, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8310	IN-SPEC UV STANDARD #30, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8350	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, 20 mg/L REFERENCE SOLUTION
8368	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, 40 mg/L REFERENCE SOLUTION
8369	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, 60 mg/L REFERENCE SOLUTION
8348	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, 80 mg/L REFERENCE SOLUTION
8311	IN-SPEC VISIBLE STANDARD 0.05, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8312	IN-SPEC VISIBLE STANDARD 0.1, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8322	IN-SPEC VISIBLE STANDARD 0.3, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8313	IN-SPEC VISIBLE STANDARD 0.5, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8314	IN-SPEC VISIBLE STANDARD 0.8, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8315	IN-SPEC VISIBLE STANDARD 1.0, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8316	IN-SPEC VISIBLE STANDARD 4.0, PHOTOMETRIC ACCURACY REFERENCE STANDARD
8372	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, 100 mg/L REFERENCE SOLUTION
8349	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, BACKGROUND SOLUTION
8385	POTASSIUM DICHROMATE, UV ABSORBANCE/LINEARITY, FULL REFERENCE KIT
8340	IN-SPEC WAVELENGTH VERIFICATION STANDARD, HOLMIUM OXIDE
8378	IN-SPEC WAVELENGTH VERIFICATION STANDARD, DIDYMIUM OXIDE
8379	IN-SPEC WAVELENGTH VERIFICATION STANDARD, SAMARIUM OXIDE
8658	IN-SPEC UV/VIS VERIFICATION KIT
8300	IN-SPEC BACKGROUND SOLUTION
8587	IN-SPEC PURPLE COLOR STANDARD, PHOTOMETRIC ACCURACY REFERENCE
8660	IN-SPEC ORANGE COLOR STANDARD, PHOTOMETRIC ACCURACY REFERENCE

# Spectroscopy Standards

ITEM #	PRODUCT NAME
8476	IN-SPEC NANO KIT, PHOTOMETRIC ACCURACY VERIFICATION
8493	IN-SPEC PATENT BLUE 254
8494	IN-SPEC AMARANTH RED 0.5 STANDARD
8473	IN-SPEC SPECTRAL RESOLUTION STANDARD, TOLUENE 0.02% in HEXANE
8380	IN-SPEC STRAY LIGHT STANDARD, POTASSIUM IODIDE, 1% SOLUTION
8381	IN-SPEC STRAY LIGHT STANDARD, SODIUM IODIDE, 1% SOLUTION
8384	POTASSIUM CHLORIDE, 1.2% SOLUTION, IN-SPEC STRAY LIGHT STANDARD
8868	IN-SPEC PURPLE COLOR STANDARD 0.45 at 260 nm
8880	IN-SPEC AMARANTH RED 0.25 AU at 280 nm/1.4 mm PATHLENGTH
8881	IN-SPEC AMARANTH RED 0.50 AU at 280 nm/1.4 mm PATHLENGTH
8882	IN-SPEC AMARANTH RED 1.0 AU at 280 nm/1.4 mm PATHLENGTH
8884	IN-SPEC AMARANTH RED 0.25 AU at 280 nm/1.8 mm PATHLENGTH
8885	IN-SPEC AMARANTH RED 0.50 AU at 280 nm/1.8 mm PATHLENGTH
8886	IN-SPEC AMARANTH RED 1.0 AU at 280 nm/1.8 mm PATHLENGTH
8888	IN-SPEC AMARANTH RED 0.25 AU at 280 nm/2 mm PATHLENGTH
8889	IN-SPEC AMARANTH RED 0.50 AU at 280 nm/2 mm PATHLENGTH
8890	IN-SPEC AMARANTH RED 1.0 AU at 280 nm/2 mm PATHLENGTH
8891	IN-SPEC AMARANTH RED 2.0 AU at 280 nm/2 mm PATHLENGTH
8893	IN-SPEC AMARANTH RED 0.50 AU at 280 nm/5 mm PATHLENGTH
8894	IN-SPEC AMARANTH RED 1.0 AU at 280 nm/5 mm PATHLENGTH
8895	IN-SPEC AMARANTH RED 2.0 AU at 280 nm/5 mm PATHLENGTH

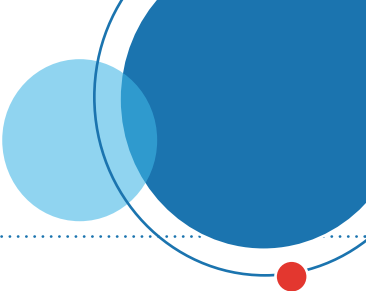
## AMCO Clear Turbidity Standards



AMCO Clear® Turbidity standards are traceable to N.I.S.T. Primary Standards due to their consistent particle size and photometric accuracy via UV-Vis spectroscopy. Scan below to view our entire AMCO Clear catalog.



# Notes



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## Lab Supplies



For your convenience, we offer some of the most popular laboratory supplies readily available to order. Scan the QR below to visit our lab supplies catalog on the GFS Chemicals website.

- Crucibles
- Glassware
- Gloves
- Pipettes
- pH paper
- Kim wipes
- Weighing paper
- and more!



# PERIODIC TABLE OF THE ELEMENTS

1 <b>H</b> HYDROGEN 1.0079																	2 <b>He</b> HELIUM 4.0026				
3 <b>Li</b> LITHIUM 6.941	4 <b>Be</b> BERYLLIUM 9.0122											9 <b>F</b> FLUORINE 18.998	10 <b>Ne</b> NEON 20.1797								
11 <b>Na</b> SODIUM 22.989	12 <b>Mg</b> MAGNESIUM 24.305											17 <b>Cl</b> CHLORINE 35.453	18 <b>Ar</b> ARGON 39.948								
19 <b>K</b> POTASSIUM 39.098	20 <b>Ca</b> CALCIUM 40.078											35 <b>Br</b> BROMINE 79.904	36 <b>Kr</b> KRYPTON 83.798								
37 <b>Rb</b> RUBIDIUM 85.467	38 <b>Sr</b> STRONTIUM 87.62											53 <b>I</b> IODINE 126.90	54 <b>Xe</b> XENON 131.293								
55 <b>Cs</b> CAESIUM 132.905	56 <b>Ba</b> BARIUM 137.327											85 <b>At</b> ASTATINE (210)	86 <b>Rn</b> RADON (222)								
87 <b>Fr</b> FRANCIUM (223)	88 <b>Ra</b> RADIUM (226)											117 <b>Uus</b> UNUNSEPTIUM (294)	118 <b>Uuo</b> UNUNOCTIUM (294)								
		5 <b>B</b> BORON 10.811	6 <b>C</b> CARBON 12.011	7 <b>N</b> NITROGEN 14.007	8 <b>O</b> OXYGEN 15.999																
		13 <b>Al</b> ALUMINIUM 26.981	14 <b>Si</b> SILICON 28.085	15 <b>P</b> PHOSPHORUS 30.974	16 <b>S</b> SULFUR 32.066																
		31 <b>Ga</b> GALLIUM 69.723	32 <b>Ge</b> GERMANIUM 72.63	33 <b>As</b> ARSENIC 74.921	34 <b>Se</b> SELENIUM 78.971																
		49 <b>In</b> INDIUM 114.818	50 <b>Sn</b> TIN 118.710	51 <b>Sb</b> ANTIMONY 121.760	52 <b>Te</b> TELLURIUM 127.60																
		81 <b>Tl</b> THALLIUM 204.38	82 <b>Pb</b> LEAD 207.2	83 <b>Bi</b> BISMUTH 208.98	84 <b>Po</b> POLONIUM (209)																
		113 <b>Uut</b> UNUNTRIUM (284)	114 <b>Fl</b> FLEROVIUM (289)	115 <b>Uup</b> UNUNPENTIUM (288)	116 <b>Lv</b> LIVERMORIUM (293)																

- Non-metal
- Alkali metal
- Alkaline earth metal
- Transition metal
- Metal
- Metalloid
- Halogen
- Noble gas
- Lanthanide
- Actinide

57 <b>La</b> LANTHANUM 138.90	58 <b>Ce</b> CERIUM 140.116	59 <b>Pr</b> PRASEODYMIUM 140.90	60 <b>Nd</b> NEODYMIUM 144.242	61 <b>Pm</b> PROMETHIUM (145)	62 <b>Sm</b> SAMARIUM 150.36	63 <b>Eu</b> EUROPIUM 151.964	64 <b>Gd</b> GADOLINIUM 157.25	65 <b>Tb</b> TERBIUM 158.92	66 <b>Dy</b> DYSPROSIUM 162.500	67 <b>Ho</b> HOLIUM 164.93	68 <b>Er</b> ERBIUM 167.259	69 <b>Tm</b> THULIUM 168.93	70 <b>Yb</b> YTTERIUM 173.054	71 <b>Lu</b> LUTETIUM 174.9668
89 <b>Ac</b> ACTINIUM (227)	90 <b>Th</b> THORIUM 232.0377	90 <b>Pa</b> PROTACTINIUM 231.03	92 <b>U</b> URANIUM 238.02	93 <b>Np</b> NEPTUNIUM (237)	94 <b>Pu</b> PLUTONIUM (244)	95 <b>Am</b> AMERICIUM (243)	96 <b>Cm</b> CURIUM (247)	97 <b>Bk</b> BERKELIUM (247)	98 <b>Cf</b> CALIFORNIUM (251)	99 <b>Es</b> EINSTEINIUM (252)	100 <b>Fm</b> FERMIUM (257)	101 <b>Md</b> MENDELEVIUM (258)	102 <b>No</b> NOBELIUM (259)	103 <b>Lr</b> LAWRENCIUM (262)

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**GFS**  
CHEMICALS®

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