



Hydranal® Reagents

800-877-3225

ONE COMPONENT VOLUMETRIC REAGENTS

Hydranal® Composites contain all the reactants (iodine, sulphur dioxide and imidazole) dissolved in diethyleneglycolmonomethyl ether (DEGEE). The loss of titre is less than 10% per year.

Volumetric reagents have a two-year minimum shelf life for an unopened bottle.

COMPOSITE REAGENTS

HYDRANAL® COMPOSITE 1

#34827	500 ml	70.23
One Component reagent	6x500ml	366.13
1ml = approx 0.7-1.0 mg H ₂ O	1 L	110.67
	6x1L	578.50

HYDRANAL® COMPOSITE 2

#34806	500 ml	70.23
One Component reagent	6x500 ml	366.13
1ml = approx. 2 mg H ₂ O	1 L	110.67
	6x1L	560.85
	2.5 L	240.10
	4x2.5L	833.06

#34806-SC-Composite 2

Honeywell's Smart Chemical	1 L	116.05
Hydranal™ bottles are embedded with an RFID chip	6x1 L	588.08

HYDRANAL® Composite 5

#34805	500 ml	70.23
General one component reagent	6x500 ml	366.13
1 ml = approx 5 mg H ₂ O	1 L	110.67
	6x1 L	578.50
	2.5 L	240.10
	4x2.5 L	833.06

#34805-SC-Composite 5

Honeywell's Smart Chemical	1 L	116.05
Hydranal™ bottles are embedded with an RFID chip	6x1L	606.57

Working Medium solvents to be used with Hydranal® Composite reagents

HYDRANAL® Liposolver CM

#37855	1 L	83.45
For water determination in non-polar substances like fats & oils. Contains chloroform and methanol.	6x1 L	426.62

HYDRANAL® Liposolver MH

#37856	1 L	93.53
For water determinations in non-polar substances like fats & oils. Contains methanol and hexane.	6x1 L	426.62

HYDRANAL® Methanol Dry

#34741	1 L	38.84
A custom made solvent for KF titration with a maximum water content of 100 ppm - 0.01%	6x1L	182.14
	2.5L	72.61
	4x2.5L	224.97

HYDRANAL® Methanol Rapid

#37817	1 L	45.25
Working medium containing accelerators for the determination of H ₂ O with shorter titration times.	6x1L	237.58
	2.5 L	99.82
	4x2.5L	348.48

HYDRANAL® Solver (Crude Oil)

#34697	1 L	107.01
Working medium containing xylene and chloroform for water determination of oils	6x1 L	557.70
	2.5 L	236.32
	4x2.5 L	817.94

SPECIALTY REAGENTS FOR ALDEHYDES & KETONES

HYDRANAL® Composite 5K

#34816	500 ml	94.42
Titration for water determination in ketones and aldehydes (1ml = approx 5 mg H ₂ O)	6x500ml	492.77
	1 L	152.51
	6x1 L	801.55
	2.5L	338.41
	4x2.5 L	1173.36

#34816-SC

Honeywell's Smart Chemical	1 L	159.92
Hydranal™ bottles are embedded with an RFID chip	6x1 L	840.46

HYDRANAL® Keto Solver

#34738	500 ml	74.00
Solvent component for water determination in aldehydes & ketones. Suppresses side reactions that generate water or consume titrant. Contains no halogenated compounds.	6x500ml	352.27
	1 l	108.39
	6x1 L	564.62

HYDRANAL® Working Medium

#34817	1 L	116.22
Solvent system which contains chloroethanol and chloroform. For the determination of water in aldehydes and ketones.	4x1 L	405.21

HYDRANAL® Medium K

#34698	1 L	115.32
Working Media used for volumetric KF titration in ketones & aldehydes to be used with Hydranal® Composite 5K.	6x1 L	571.55

HYDRANAL® Composolver E

#34734	1 L	66.55
An ethanol-based working medium formulated for use with the standard one-component Hydranal® Composites. It permits a methanol-free analysis using a single component reagent.	6x1 L	348.48
	2.5 L	137.39
	4x2.5 L	478.93

TWO COMPONENT VOLUMETRIC REAGENTS

With two component reagents, the reactants are in separate bottles. The titrant is a solution of iodine and alcohol. The solvent solution contains the sulphur dioxide and imidazole in a specific alcohol. The reagents remain stable and unchanged for a minimum of two years as long as the bottles remain unopened.

TITRANTS	500 ml	48.62
HYDRANAL® Titrant 2	6x500ml	254.46
#34811 DEA	1 L	85.49
One ml is equivalent to 2ml ± 0.01 mg H ₂ O	6x1L	445.75
HYDRANAL® Titrant 5	500 ml	48.62
#34801 DEA	6x500 ml	254.46
One ml is equivalent to 5.00 ± 0.02 mg H ₂ O	1 L	91.94
	6x1L	481.11
	2.5 L	185.65
	4x2.5 L	645.26

SOLVENTS

New

Medium for Volumetric 2 comp. titration		
#34432 Hydranal® Solvent Fi	1 L	105.90
Methanol based, free of imidazole	6x1L	550.88
#34431 Hydranal® Solvent E-Fi	1 L	104.82
Ethanol based, free of imidazole	6x1L	546.94
HYDRANAL® Solvent S	1 L	84.73
#34800	6x1 L	440.71
A methanol based standard solvent for volumetric KF applications	2.5 L	175.55
HYDRANAL® Solvent CM	4x2.5 L	609.28
#34812	1 L	107.11
Solvent component containing methanol and chloroform for the determination of non-polar samples like oils & fats.	6x1 L	558.78
	2.5 L	213.42
	4x2.5 L	737.46
HYDRANAL® Solvent Oil		
#34749		
For water determination in non-polar substances like fats and oils. Contains methanol and hexane.	1 L	107.23
	6x1 L	558.78

Specialty Reagents for Aldehydes and Ketones

HYDRANAL® Solvent E	1 L	83.86
#34730	6x1L	437.55
An ethanol based working medium containing imidazole, sulphur dioxide and diethanolamine. Can be used in the analysis of aldehydes and ketones when used with other methanol free reagents.	2.5 L	173.64
	4x2.5 L	602.97

HYDRANAL® Titrant 2E		
#34723 DEA	1 L	85.49
A two component reagent based on ethanol. Can be used with any combination of traditional solvents. When used with Hydranal® Solvent E, it provides a methanol-free system for the analysis with a titre of 2.	6x1L	445.75

HYDRANAL® Titrant 5E		
#34732 DEA		
A two-component reagent based on ethanol Can be used with any combination of traditional reagents. When used with the Hydranal Solvent E, it provides a methanol. free system for the analysis with a titre of 5.	500 ml	79.44
	6x500mL	433.71

HYDRANAL® REAGENTS COULOMETRIC REAGENTS

Coulometry usually requires the use of an anolyte and a catholyte. Hydranal® anolytes contain iodide and a sulphur dioxide/ imidazole buffer in a suitable solvent. Coulometric reagents have a shelf life of 5 years, as long as bottle remains unopened.

ANOLYTES

HYDRANAL® Coulomat A	500 ml	112.21
#34807	6x500 ml	574.42
Anolyte standard two component coulometry Contains methanol and chloroform as the solvents. Water capacity is >10 mg/ml.		

HYDRANAL® Coulomat AG	500 ml	111.61
#34836	6x500 ml	581.36
For coulometry in cells with or without a diaphragm.	1 L	195.21
Free of carbon tetrachloride and chloroform.	6x1 L	1018.49

HYDRANAL® Coulomat AG-H		
#34843	500 ml	125.65
Coulometric analysis for cells with or without a diaphragm. Effective for very polar samples (long- chained hydrocarbons). Free of carbon tetrachloride and chloroform	6x500 ml	679.43

New

#34433 -HYDRANAL® Coulomat AG-F	500 ml	120.53
Anolyte for Coulometric KF w or w/o diaphragm. Methanol based, free of imidazole	6x500 ml	627.86

HYDRANAL® Coulomat AD	500 ml	145.52
#34810	6x500 ml	757.86
For coulometry in cells without a diaphragm. Free of carbon tetrachloride and chloroform.		

CATHOLYTES

#34840 HYDRANAL® Coulomat CG	50 ml	89.85
Standard catholyte for coulometric cells with diaphragm. It contains protected ammonium salts as the reactive component and methanol.	6x50 ml	470.03

HYDRANAL® Coulomat Oil		
#34868	100 ml	35.56
Anolyte for determination of oils. Based on methanol, with addition of aromatic and halogenated hydrocarbons to aid solubility.	6x100 ml	186.00
	500 ml	120.46
	6x500 ml	630.07

HYDRANAL® Coulomat AK		
#34820	500 ml	260.01
Anolyte for coulometric water determination in samples containing ketones.	6x500 ml	1347.46

HYDRANAL® Coulomat CG-K		
#34821	50 ml	229.64
Catholyte for coulometric water determination in samples of aldehydes & ketones. Packaged as 10x5ml ampoules.	6x50 ml	1193.08

SPECIALTY REAGENTS

HYDRANAL® Coulomat E		
#34726	500 ml	130.95
Replaces much of the methanol with ethanol reducing the toxicity without affecting performance. Can be used in systems with or without a diaphragm.	6x500 ml	681.95

HYDRANAL® Coulomat AF7		
#34829	1 L	237.22
Anolyte for two-component coulometry, specifically for the AF7 coulometer. It is used with Composite 5 as the catholyte.	6x1 L	1239.90

SPECIALTY REAGENTS

HYDRANAL® STANDARDS

Standards are necessary to standardize and control reagents, to check reliability of the titrator and to test instruments according to the requirements of ISO9000, GMP, GLP and FDA guidelines. (A Manufacturer's Test certificate with exact specifications is included with each standard.)

CERTIFIED STANDARDS**HYDRANAL® Water standard 0.10**

#34847			
A certified standard containing 0.01 mg of H ₂ O per g (0.10 mg/g=0.01%).	40 ml		110.29
40 ml is packaged as 10x4 ml ampoules.	6x40 ml		575.89

HYDRANAL® Water Standard 1.0

#34828			
A certified standard containing 1.00 mg of H ₂ O per g (1 mg/g = 0.1%).	40 ml		110.29
40 ml is packaged as 10x4ml ampoules.	6x40 ml		575.89

HYDRANAL® Water Standard 10.0 #34849

A certified standard containing 10.0 mg of H ₂ O per g (10 mg/g= 1%).	80 ml		110.29
80 ml is packaged as 10 x 8 ml ampoules.	6x80 ml		575.89

NEW**ISO GUIDE 34 WATER STANDARDS****HYDRANAL® CRM WATER STANDARDS**

#34425 Water content 10.0 mg/g = 1.0%	80ml(10x8ml)		129.32
#34426 Water content 1.0 mg/g = 0.1%	40ml(10x4ml)		129.32
#34446 Water content 0.1 mg/g = .01%	40ml(10x4ml)		110.29
#34424 Solid CRM Standard, water content Approx. 15.66%	10 gm		108.61

BUFFERS

#34804	500 ml		60.64
	6x500 ml		318.23

For KF titrations of samples containing

HYDRANAL® Molecular Sieve 0.3nm	250gm		63.14
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#34241

HYDRANAL® Buffer Base

#37859	1 L		103.72
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For KF titrations of samples containing Salicylic acid, Buffer capacity 1 mmoles base/ml.

HYDRANAL® Humidity Absorber

#34788	500 gm		53.57
	1 kg		88.85

HYDRANAL® Formamide Dry

#34724	1 L		82.81
	6x 1 L		356.04

ADDITIONAL STANDARDS

HYDRANAL® Water Standard KF oven 220-230° C

#34748	10 gm		75.69
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Solid standard specially designed to check control/validate KF ovens @ 229-230 ° C. Consists of

finely milled potassium citrate-1-hydrate with a theoretical water content of 5.55% by weight.

HYDRANAL® Coulomat AG Oven

#34739	500 ml		130.95
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Anolyte for coulometric water determinations using a KF oven. Ensures

low error even for long duration determinations. Free of halogenated hydrocarbons.

HYDRANAL® Standard 5.0 Non-Hygroscopic

#34813	100 ml		26.62
A non-hygroscopic butanol/xylene mixture for volumetric standardization.	6x100 ml		138.01
Water content is 5.00 ± 0.02 mg/ml	500 ml		68.70
	6x500 ml		315.71

HYDRANAL® Water in Methanol Standard 5.00

#34802	1 L		57.74
A standard designed specifically for use in doing back titrations. Water content is 5.00 ± 0.02 mg/ml	500 ml		42.24

HYDRANAL® Standard Sodium Tartrate-2-hydrate

#34803	100 gm		58.23
A primary standard for volumetric titration.	6x100 gm		305.00
Water content = 15.66 +/- 0.05%			

HYDRANAL® Water Standard Oil

#34694	80 ml		169.49
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A standard specifically designed for water determination in oils by coulometric titration. Water content in low ppm range.

HYDRANAL® Water Standard KF Oven 140-160° C

#34693	10 gm		82.67
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Solid standard specifically designed to check/control/validate KF ovens @ 140-160 deg. C. Water content approx. 5% (exact value stated on C of A).

HYDRANAL® Sodium Tartrate Dihydrate

#34696	25 gm		35.70
	6x25 gm		214.19

HYDRANAL® Chloroform

#37863	1 L		65.17
	6x 1 L		339.04

HYDRANAL® Xylene

#37866	1 L		79.29
	6x1 L		414.01

HYDRANAL® Salicylic acid

#37865	500 gm		45.76
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HYDRANAL® Imidazole

#37864	500 gm		111.81
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HYDRANAL® Benzoic acid

#32035	500 gm		54.45
	6x500 gm		287.45