# Wine Standards & Reagents



The Compendium of International Methods of Wine and Must Analysis (edition 2013) includes all test methods, approved by the General Assembly of Representatives of the Member Governments of the OIV (International Organisation of Vine and Wine) up to June 2012. First published in 1962, the European Union now recognises all of the test methods in the Compendium for the testing and control of Viticultural Products. Through its role in harmonising methods of analysis, the Compendium facilitates globalisation within the wine industry and in conjunction with the International Code of Oenological Practices and the International Oenological Codex contains content of enormous scientific value.

Each method of analysis contained within the Compendium, contains considerable detail on the Reagents, Standards, Reference Materials and Analytical Volumetric Solutions required to perform that particular method. We are proud to present throughout this catalogue, the most comprehensive range of products available on the market for Wine and Must Analysis, irrespective of whether the methodology is instrumental or manual. Products developed specifically for Wine and Must analysis are contained in this chapter but products of relevance can be found in almost every part of this catalogue. All products contained herein either match or exceed the specifications laid down in the Compendium. Reagecon has a large department dedicated to the development of Industry Specific Customised products and several additional products are under development for Wine and Must Analysis. We believe the products presented will meet or exceed your expectations, bring scientific rigour to your analytical techniques and offer you real value for money.

#### Laboratory Reagents & Analytical Volumetric Solutions for the Wine Industry

Product No.	Description	Pack Size
KNAT08861	Alkaline Solution (Potassium Sodium Tartrate) 0,886M	1L
CAOH2M105	Calcium Hydroxide 2M suspension	500ml
CUS11	Copper Sulfate solution 1%	1L
CUS101	Copper Sulfate solution 10%	1L
DEXT0055	Dextrose Solution 0.5%	500ml
NATB46	di-Sodium tetra-Borate 10-hydrate solution 4,6%	100ml
FS0101	Fehlings solution A	1L
FS010105	Fehlings solution A	500ml
FS0102	Fehlings solution B	1L
FS010205	Fehlings solution B	500ml
FOCIRE01	Folin-Ciocalteu's Reagent	100ml
K2SO41	Gypsumetric Liquor . 1 ml corresponds to 0.01 g of K <sub>2</sub> SO <sub>4</sub>	100ml
H20011	Hydrochloric Acid 0.01M	1L
H20101	Hydrochloric Acid 0.1N	1L
H210G1	Hydrochloric Acid 10 g/l	1L
H21001	Hydrochloric Acid 1M	1L
HCIS115	Hydrochloric Acid-Water solution 50:50	5L
HP0905	Hydrogen Peroxide 0.9% w/v	500ml
HP1005	Hydrogen Peroxide 10% w/v stabilised	500ml
HP1505	Hydrogen Peroxide 15%	500ml
HP25VV05	Phosphoric Acid 25%	500ml

Product No.	Description	Pack Size
HP301	Hydrogen Peroxide 3% w/v	1L
HP305	Hydrogen Peroxide 3% w/v	5L
I2001F	lodine 0.01M	1L
I2001H	lodine 0.01M	500ml
I2005F	lodine 0.05M	1L
I2005H	lodine 0.05M	500ml
I20031H	lodine 0.03125M	500ml
KFECN10WV1	Potassium Hexacyanoferrate(II) solution 10% w/v	1L
KOH21001	Potassium Hydroxide 1 mol/l (1N)	1L
KOH20101	Potassium Hydroxide 0.1M	1L
KI20WV1	Potassium Iodide 20% Solution	1L
KI30WV1	Potassium lodide solution 30% w/v	1L
KT20WV1	Potassium Thiocyanate solution 20% w/v	1L
KT5WV1	Potassium Thiocyanate solution 5% w/v	1L
SCS20WV1	Sodium Carbonate 20%	1L
S20011	Sodium Hydroxide 0.01M	1L
S20021	Sodium Hydroxide 0.02M	1L
S20101	Sodium Hydroxide 0,1 mol/l (0,1N)	1L
S2013321	Sodium Hydroxide 0,1332 mol/l (0,1332N)	1L
S20401	Sodium Hydroxide 0,4 mol/l (0,4N)	1L
S216661	Sodium Hydroxide 1,666 mol/l (1,666N)	1L
S10WV1	Sodium Hydroxide 10%	1L
S10001	Sodium Hydroxide 10M	1L
S201005	Sodium Hydroxide 0.1M	500ml
S20501	Sodium Hydroxide 0.5M	1L
S20251	Sodium Hydroxide 0.25M	1L
S2035461	Sodium Hydroxide 0.35465M	1L
SU33VV1	Sulphuric Acid 1:3 V/V	1L
SU2501	Sulphuric Acid 1:4 V/V	1L
SU20VV1	Sulphuric Acid 1:5V/V	1L
T20021	Sodium Thiosulfate 0.02M	1L
T20101	Sodium Thiosulfate 0.1M	1L
T2005511	Sodium Thiosulphate 0.0551M	1L
T20501	Sodium Thiosulphate 0,5 N	1L
ST105	Starch solution 1%	500ml
ST1001	Starch solution 1%	1L
TISAB-WINE	TISAB for wine analysis (Dir. 2676/90) for the fluoride determination by selective electrodes. pH 5,5±0,1	250ml

## Coloured Indicators for the Wine Industry. (further indicators can be found in the section Analytical Volumetric Solutions)

Product No.	Description	Pack Size
TASHI010	Indicator Solution for mixed Sulphur	100ml
BRCG1501	Bromocresol Green, 1% Solution	100ml
BRTH040250	Bromothymol Blue 0.4%	250ml
BRTH05	Bromothymol Blue solution 0.4%	500ml
IPT1025	Phenolphthalein 1%	250ml
MTBLU10250	Methylene Blue 1% Solution	250ml
BRBP05	Indicator Solution Bromophenol Blue, 0.04%	500ml
1063601	Indicator Solution Phenol Red, 0.02%	100ml
1055102	Indicator Solution Methyl Red, 0.02%	100ml

## Ethanol Density Standards for calibration of alcoholometers & densimeters in oenology. For more Density Standards please see chapters dedicated to Density.

Product No.	Description	Pack Size
ET08VV025	8.5% v/v Ethanol/Water nominal density 0.9883g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET10VV025	10% v/v Ethanol/Water nominal density 0.9865g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET11VV025	11% v/v Ethanol/Water nominal density 0.9853g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET12VV025	12% v/v Ethanol/Water nominal density 0.9891g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET13VV025	13.5% v/v Ethanol/Water nominal density 0.9824g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET14VV025	14% v/v Ethanol/Water nominal density 0.9868g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET16VV025	16% v/v Ethanol/Water nominal density 0.9795g/ml for calibration of alcoholometers and densimeters in oenology	250ml
ET20VV025	20% v/v Ethanol/Water nominal density 0.9753g/ml for calibration of alcoholometers and densimeters in oenology	250ml

## Brix Standards for the Wine Industry. For further Refractive Index & Brix standards please see chapters dedicated to this subject area.

Product No.	Description (20°C)	Nominal Refractive Index @ 20°C	Pack size
BS149	Sucrose (Brix) Standard - 14.9%	1.355519	15ml
BS194	Sucrose (Brix) Standard - 19.4%	1.362846	15ml
BS238	Sucrose (Brix) Standard - 23.8%	1.370261	15ml

# Reagecon

### Soil Testing Standards & Reagents

The testing of soil is a large and rapidly growing area within Analytical Science worldwide. A survey published in the USA in 1998 found that about 5 million samples were analysed annually in that country and even then this number was considered an underestimation. When the rapid growth in this area is factored in and the numbers extrapolated on a worldwide basis, soil testing is now a significant component of the work of public, commercial and fertilizer company laboratories in all crop growing areas of the world.

This growth is driven by the need to provide growers with accurate information as an enabler to applying correct and economical quantities of fertilizer, and monitor soil fertility. Secondly it is driven by a requirement that farmers/growers and environmental protectors operate in an environmentally friendly way, thus reducing pollution of food, air, waterways and other amenities.

For soil analysis to be effective and efficient it is vital that testing methodologies are standardized, traceable, comparable and of known measurement uncertainty. A significant recent development has been the acceleration of quality assurance, quality control and the use of proficiency testing in soil testing laboratories. Added to these advances, has been a worldwide proliferation in the numbers of soil laboratories being awarded various certificates and accreditations, e.g. ISO 17025



A pivotal constituent to all of these advances is the availability of high quality Standards (physical and chemical) and Reagents. This catalogue contains the largest selection of products relevant to soil testing available worldwide. The products are presented in three ways. Firstly, they can be accessed in the various catalogue sections, which are categorized on the basis of application. These include standards for metals, anions, conductivity and pH. They also include organic standards for pollutants including Pesticides, Phenols, Volatile Organic Carbons and Polycyclic Aromatic Hydrocarbons as examples.

Secondly, this section covers several Analytical Volumetric Solutions, Indicators, Extraction Solutions and Reagents for various specific soil testing methods. This list is indicative only. Finally Reagecon has the capability, competence, track record and experience to offer an outstanding range of bespoke products for a wide variety of methods relating to soil analysis.

We hope you find the products in this section and the remainder of the catalogue helpful. For quotes or information on additional products contact us at sales@reagecon.ie

Product No.	Description	Pack Size
NHFED01	Ammonium Fluoride-EDTA Stock Reagent	1L
APDC01	APDC Butyl Acetate-Ethanol Reagent	1L
BSE01	Boron Standard in Extraction Reagent	1L
BRAY01	Bray P1 Extracting Reagent Concentrate	1L
BMASK01	Buffer Masking Reagent	1L
CACLSS01	Calcium Chloride Stock Solution	1L
CACL20011	Calcium Chloride, CaCl2, 0.01M	1L
CTA01	Chromotopic Acid Solution (CTA)	1L
CUES01	Copper Standard in Extracting Reagent	1L
CUZN01	Copper-Zinc Standard	1L
DTPAE01	DTPA Extraction Reagent Concentrate	1L
DTPA00051	DTPA Solution, 0.005M	1L
H26001	Hydrochloric Acid, HCl, 6N	1L
FEE01	Iron Standard in Extraction Reagent	1L
LACS01	Lanthanum Compensating Solution	1L
LIWS01	Lithium Working Solution, 130.14ppm	1L
MGCLS01	Magnesium Chloride Stock Solution	1L
MGERS01	Magnesium Standard in Extracting Reagent	1L
ICCB07	Magnesium Standard in Water, Mg, 1000ppm	500ml
MNES01	Manganese Standard in Extracting Reagent	1L
MEHL101	Mehlich #1 Extracting Reagent	1L
MEHL301	Mehlich #3 Final Extraction Reagent	1L
MEHLBS01	Mehlich Buffer Solution	1L
MEHLBE01	Mehlich-Bowling Extracting Reagent	1L
MOREXT	Morgan Extraction Reagent	25L
SOILSP01	MS Soil Spike Standard	1L
SOILSPS01	MS Spike Sample Standard #2 (For Soil)	1L
NIES01	Nickel Standard in Extraction Reagent	1L
NNER01	Nitrate-Nitrogen Extracting Reagent	1L
NNS01	Nitrate-Nitrogen Standard	1L
NER01	Nitrogen Standard in Extracting Reagent	1L
OLSER01	Olsen's Extraction Reagent concentrate	1L
OLSMR01	Olsen's Mixed Reagent	1L
KCR267F	Potassium Dichromate Reagent, 0.267N	1L
SMPB01	SMP Buffer Solution	1L
NACLSS01	Sodium Chloride Stock Solution	1L
NASER01	Sodium Standard in Extraction Reagent	1L
SPISL01	Spiking Solution for Water and Soil	1L
SRCL201	Strontium Chloride Diluting Solution	1L
MEHLS01	Sulfuric-Molybdate Solution (Mehlich #1)	1L



### **Pulp & Paper Process Testing**

Reagecon offers the largest range of Reagents, Standards and Analytical Volumetric Solutions available in the market place for this important and heavily regulated industry. These products facilitate savings in time and money and offer traceability, comparability and convenience. A large part of the pulp and paper process industry uses Standard Test Methods developed through an organisation called TAPPI (Technical Association of the Pulp and Paper Industry).

TAPPI Standards may be in the form of Test Methods or other documents that include specifications, guidelines and practices. These are available from the organisation as a compendium for a wide range of physical, organic and inorganic analyses using manual and instrumental techniques. Tolerances and guidelines are provided for all Reagents and Standards specified and Reagecon matches or exceeds these tolerances in all cases. Products listed in most sections of this catalogue are relevant to pulp and paper process testing. This section contains a range of products developed specifically for TAPPI methods.

A list of Reagecon part numbers that are cross referenced to each TAPPI method is available upon request.

#### Reagecon manufacture the following standards and reagents for use in the Pulp & Paper industry.

Product No.	Description	Pack Size
CH3C00H201	Acetic Acid, CH <sub>3</sub> COOH, 20% v/v	1L
WTR041	Barium Chloride, BaCl <sub>2</sub> , 10% w/v	1L
WTR061	Barium Chloride, BaCl <sub>2</sub> , 12% w/v	1L
WTR081	Barium Chloride, BaCl <sub>2</sub> , 20% w/v	1L
H2051671	Hydrochloric Acid, HCl, 0.5167M	1L
H207331	Hydrochloric Acid, HCl, 0.773M	1L
H25VVJ	Hydrochloric Acid, HCl, 25% v/v	2.5L
3001500 EP	Hydrochloric Acid, HCl, 6N	1L
KI10WV1	Potassium lodide, KI, 10% w/v	1L
PP2002F	Potassium Permanganate, KMnO <sub>4</sub> , 0.02M	1L
N201709F	Silver Nitrate 0.1709N 0.1709M	1L
N20250F	Silver Nitrate, AgNO <sub>3</sub> , 0.25M	1L
S20011	Sodium Hydroxide, NaOH, 0.01M	1L
S203131	Sodium Hydroxide, NaOH, 0.313M	1L
T20101	Sodium Thiosulfate, Na <sub>2</sub> S2O <sub>3</sub> , 0.1M	1L
T20201	Sodium Thiosulfate, Na <sub>2</sub> S2O <sub>3</sub> , 0.2M	1L
T21001	Sodium Thiosulfate, Na <sub>2</sub> S2O <sub>3</sub> , 1M	1L
SU2012751	Sulfuric Acid, H <sub>2</sub> SO <sub>4</sub> , 0.1275M	1L
SU222001	Sulfuric Acid, H <sub>2</sub> SO <sub>4</sub> , 4N	1L

# Dairy Standards & Reagents

Analytical tests to evaluate dairy products cover a wide variety of materials of different chemical and physical composition. These include products that contain milk in either dilute or concentrated format, various consistencies ranging from liquid to solid and in some instances products that have several non dairy products added.

Because of this variety the fitness for purpose aspect in selecting the most appropriate methodology is critical. Method selection will also depend on whether the test is being carried out for regulatory or compliance reasons, for quality control, quality assurance, food safety, or product stability purposes.



Reagecon manufactures a wide range of Physical and Chemical Standards that are appropriate to the testing of dairy products. Several of these products, which are specific or unique to the dairy industry, are listed in this section. Several others relating to the measurement of pH, Conductivity, Refractive Index, Density, Metals and Anions are listed under the appropriate headings elsewhere in this catalogue.

Standards and reagents relevant to the measurement of vitamins, food additives, preservatives, colours, flavours, fragrances, sugars and sanitisation residues/by-products are currently under development. Updates on this development pipeline can be tracked and viewed at www.reagecon.com.

### **Reagents & Standards for the Dairy Industry**

Product No.	Description	Pack Size
SUFMT5	Gerber Test Sulphuric Acid FMT d. 1.815-1.825	5L
SUFMT25	Gerber Test Sulphuric Acid FMT d. 1.815-1.825	25L
SUFMTJ	Gerber Test Sulphuric Acid FMT d. 1.815-1.825	2.5L
BOA25	Kjeldahl Reagent 2% w/v Boric Acid solution without indicator	5L
S30WW5	Kjeldahl Reagent 30% w/w (40% w/v) Sodium Hydroxide	5L
S30WWLN	Kjeldahl Reagent 30% w/w (40% w/v) Sodium Hydroxide	5L
KJR015	Kjeldahl Reagent 4% w/v Boric Acid solution with indicator	5L
BOA4	Kjeldahl Reagent 4% w/v Boric Acid solution without indicator	5L
ST840	Kjeldahl Reagent 40% w/v Sodium Hydroxide/8% Sodium Thiosulphate	25L
ST841	Kjeldahl Reagent 40% w/v Sodium Hydroxide/8% Sodium Thiosulphate	5L
WTR045	Kjeldahl Reagent Barium Chloride solution 10% w/v	5L
BOAI225	Kjeldahl Reagent Boric Acid 2% with indicator - 25L	25L
BOA3310	Kjeldahl Reagent Boric Acid 3.3% solution	10L
PFS1	Ferroin Indicator solution	100ml
FEA25	Iron Alum (Volhard) Indicator solution	250ml
MTR05025	Methyl Orange Indicator Alcoholic solution 0.1%	250ml
IPT01H	Phenolphthalein Indicator Solution 0.1%	500ml
IPT05F	Phenolphthalein Indicator Solution 0.5%	1L
IPT05W	Phenolphthalein Indicator Solution 0.5%	2.5L
IPT10H	Phenolphthalein Indicator Solution 1%	500ml
IPT10W	Phenolphthalein Indicator Solution 1%	2.5L
IPT1025	Phenolphthalein Indicator Solution 1%	250ml
IPT16W	Phenolphthalein Indicator Solution 1.6%	2.5L
PCS5	Potassium chromate, 5% Indicator solution	500ml
TB04F	Thymol Blue Indicator Alcoholic Solution 0.04%	500ml
NPD03	Phosphatase Test 4-Nitrophenyl Di-Sodium Phosphate	12 x 0.15g
NPD04	Phosphatase Test Carbonate Bi-Carbonate Buffer	12 x 2.5g
CH3CN501	Acetonitrile CH <sub>3</sub> CN, 50% v/v	1L
BAB2O41	Barium Borate-Hydroxide Buffer	1L
BAOH011	Barium Hydroxide Ba(OH) <sub>2</sub> , 0.1N	1L
BOR0091	Borax Buffer, 0.00996M	1L
BUT7051	n-Butanol CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>2</sub> OH, 7.5% v/v	1L
CUS051	Copper Sulfate CuSO <sub>4</sub> , 0.05%	1L
CUS11	Copper Sulfate CuSO <sub>4</sub> , 1%	1L
CUSSOLA	Copper Sulfate Solution B 72.5g/L	1L
CUSSOLB	Copper Sulfate Solution A 440.9mg Cu/25ml	1L
FESO41	Ferrous Sulfate Solution FeSO <sub>4</sub>	1L
PBA101	Lead Acetate Solution (CH <sub>3</sub> COO) <sub>2</sub> Pb, 10%	1L
PB00574	Phosphate Buffer, 0.05M pH 7.4	1L
EFSKNO	Potassium Nitrate KNO <sub>3</sub> , 10% w/v	100ml
PP500F	Potassium Permanganate KMnO <sub>4</sub> , 5% w/v	1L
S2WW1	Sodium Hydroxide, NaOH, 2% w/v	1L
ZS601	Zinc Sulfate, ZnSO4, 6% w/v	1L

