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## **INDICE - INDEX**

GENERAL PROCEDURE.....	2
ACETIC ACID SLR.....	3
ACETIC ACID.....	4
ACETIC ACID.....	5
CITRIC ACID.....	6
D-GLUCONIC ACID.....	7
D-LACTIC ACID.....	8
L-LACTIC ACID.....	9
L-MALIC ACID.....	10
TARTARIC ACID.....	11
ACETALDHEYDE.....	12
ANTHOCYANS.....	13
AMMONIACAL NITROGEN.....	14
ALPHA-AMMINIC NITROGEN.....	15
IONIC CALCIUM.....	16
CATECHINS.....	17
CATECHINS SLR.....	18
CHLORIDE.....	19
COLOUR 420-520-620.....	20
IONIC IRON.....	21
GLYCEROL.....	22
GLUCOSE.....	23
GLUCOSE + FRUCTOSE.....	24
MAGNESIUM.....	25
TOTAL POLYPHENOLS.....	26
POTASSIUM.....	27
COPPER.....	28
FREE SO2.....	29
TOTAL SO2.....	30
UREA.....	31
IPT – TOTAL POLYPHENOLS INDEX.....	32

## GENERAL PROCEDURE

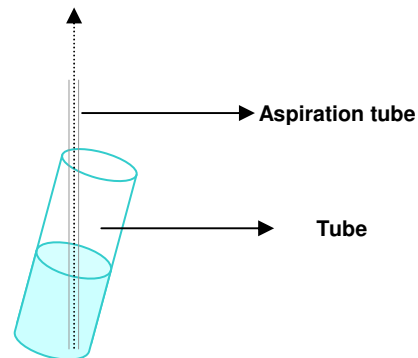
Switch on the instrument 25 minutes before the execution of the method to stabilize the lamp and the incubator temperature.

### FLOW CELL ASPIRATION

The aspiration of the liquid through the flow cell follow these steps:

- **LIQUID REQUEST:** Tool buzzer alert the operator to immerse the suction tube into the liquid. The open end of the tube should always draw the liquid into the lower part of the container.

*The figure shows an example:*



- Once the tube immersed in the liquid, press the **GO** button to start the aspiration.
- Over the aspiration of the liquid (depending on the settings) the instrument alerts the operator via buzzer e wait **three seconds** to allow the removal of the tube from the liquid.

# ACETIC ACID SLR

*Reagent for enzymatic assay  
of acetic acid on wine*

<b>REF</b>	<b>EN001L</b>
	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Decolorate red wine with high polyphenols concentration.  
- Degas sparkling wine.

**REAGENT PREPARATION**

**Working reagent 1:** Reagent SB.

**Working reagent 2:** To prepare 10,5 mL (sufficient for about 5 analysis) of Working Reagent 2 mix with following ratio:

Reagent 1	9,0 mL	Reagent 3	0,250 mL
Reagent 2	1,0 mL	Reagent 4	0,250 mL

Shake until completely dissolved. Let it stay 5 minutes at +15-25°C before the use.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

**Working reagent 1:** Stable 30 days at +2-8°C.

**Working reagent 2:** Stable 2 days at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

**SAMPLE BLANK**

Working Reagent 1    2000 µL Distilled water      40 µL <div style="text-align: center; margin-top: 10px;"></div>	Working Reagent 1    2000 µL Standard                40 µL <div style="text-align: center; margin-top: 10px;"></div>	Working Reagent 1    2000 µL Sample                 40 µL <div style="text-align: center; margin-top: 10px;"> </div>
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**SAMPLE**


Working reagent 2    2000 µL Distilled water      40 µL <div style="text-align: center; margin-top: 10px;"></div>	Working reagent 2    2000 µL Standard                40 µL <div style="text-align: center; margin-top: 10px;"></div>	Working reagent 2    2000 µL Sample                 40 µL <div style="text-align: center; margin-top: 10px;"> </div>
---	--	--

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument) then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# ACETIC ACID

*Reagent for enzymatic assay  
of acetic acid on wine*

<b>REF</b>	<b>EN001S</b>
	<b>10x10mL</b>

**SAMPLE**

Wine.

**Note:** - Decolorate red wine with high polyphenols concentration.  
- Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Reagent SB .

**Working Reagent 2:** Reconstitute one vial of Reagent 4 with 1 mL of Reagent 5. Wait 15 minutes until completely dissolved.  
Reconstitute one vial of Reagent 2 with 10 mL of Reagent 1, then add 0,250 mL of Reagent 3 and 0,5 mL of Reagent 4. Shake until completely dissolved.  
Let it stay 5 minutes at +15-25°C before the use.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

**Working Reagent 1:** Stable 30 days at +2-8°C.

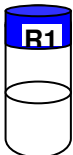

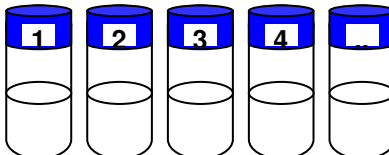
**Working Reagent 2:** Stable 2 days at +2-8°C.

**Reagent 4:** Stable 30 days at +2-8°C.



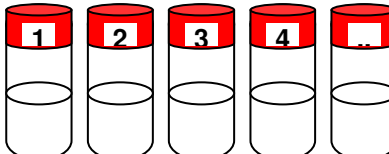
**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

**SAMPLE BLANK**

Working Reagent 1    2000 µL Distilled water        40 µL  	Working Reagent 1    2000 µL Standard                40 µL  	Working Reagent 1    2000 µL Sample                 40 µL  
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**SAMPLE**

Working Reagent 2    2000 µL Distilled water        40 µL  	Working Reagent 2    2000 µL Standard                40 µL  	Working Reagent 2    2000 µL Sample                 40 µL  
---	--	---

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# ACETIC ACID

*Reagent for enzymatic assay  
of acetic acid on wine*

<b>REF</b>	<b>EN002S</b>
$\Sigma$	<b>5x20mL</b>

## SAMPLE

Wine.

**Note:** - Decolorate red wine with high polyphenols concentration.  
- Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent 1:** Reagent SB .

**Working Reagent 2:**

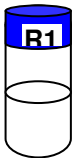

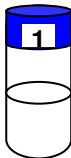
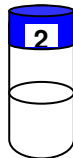

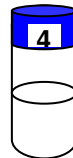
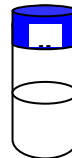

Reconstitute one vial of Reagent 4 with 1 mL of Reagent 5. Wait 15 minutes until completely dissolved.  
Reconstitute one vial of Reagent 2 with 20 mL of Reagent 1, then add 0,500 mL of Reagent 3 and 1,0 mL of Reagent 4. Shake until completely dissolved. Let it stay 5 minutes at +15-25°C before the use.



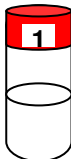


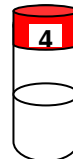
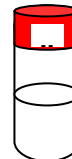

## WORKING REAGENT STABILITY

- Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.
- Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.
- Working Reagent 1:** Stable 30 days at +2-8°C.
- Working Reagent 2:** Stable 2 days at +2-8°C.
- Reagent 4:** Stable 30 days at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	2000 µL 40 µL	Working Reagent 1 Standard	2000 µL 40 µL	Working Reagent 1 Sample	2000 µL 40 µL
					
					
					

SAMPLE					
Working Reagent 2 Distilled water	2000 µL 40 µL	Working Reagent 2 Standard	2000 µL 40 µL	Working Reagent 2 Sample	2000 µL 40 µL
					
					
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.  
Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# CITRIC ACID

*Reagent for enzymatic assay  
of citric acid on wine*

<b>REF</b>	<b>EN003</b>
	<b>1x80mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Reagent BC .

**Working Reagent 2:** **Reconstitute one vial of Reagent 3 with 1 mL of Reagent 4.**  
To prepare Working Reagent 2, mix nine volumes of Reagent 1 with one volume of Reagent 2 (9mL+1mL) depending of the numbers of samples must be performed, then dilute Reagent 3 already reconstitute with a ratio 1:21 in this solution.

**Example:** for about 5 determinations mix 9mL of Reagent 1 with 1mL of Reagent 2, then add 0,500mL of Reagent 3.

**WORKING REAGENT STABILITY**

- Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.
- Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.
- Working Reagent 1:** Stable 30 days at +2-8°C.
- Working Reagent 2:** Stable 2 days at +2-8°C.
- Reagent 3:** Stable 6 hours at +15-25°C, 3 days at +2-8°C, 20 days at -20°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	2000 µL 50 µL	Working Reagent 1 Standard	2000 µL 50 µL	Working Reagent 1 Sample	2000 µL 50 µL

SAMPLE					
Working Reagent 2 Distilled water	2000 µL 50 µL	Working Reagent 2 Standard	2000 µL 50 µL	Working Reagent 2 Sample	2000 µL 50 µL

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.  
Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# D-GLUCONIC ACID

Reagent for enzymatic assay  
of D-gluconic acid on wine

REF	<b>EN004</b>
Σ	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare the Working Reagent 2, mix nine volumes of Chromogen Diluent with one volume of Chromogen (9mL+1mL) depending of the numbers of samples must be performed, then dilute the Enzyme on the ratio 1:21 in this solution.

**Example:** for about 5 determinations mix 9mL of Chromogen Diluent with 1mL of Chromogen, then add 0,500mL of Enzyme.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

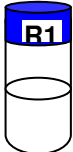

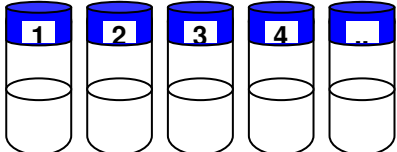
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



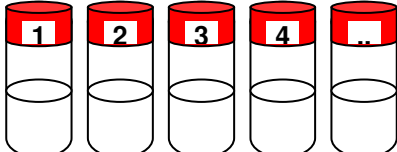
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 1 day at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 40 µL	Working Reagent 1 Standard	2000 µL 40 µL	Working Reagent 1 Sample	2000 µL 40 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 40 µL	Working Reagent 2 Standard	2000 µL 40 µL	Working Reagent 2 Sample	2000 µL 40 µL
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# D-LACTIC ACID

*Reagent for enzymatic assay  
of D-lactic acid on wine*

<b>REF</b>	<b>EN006</b>
	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare the Working Reagent 2, mix one volume of Chromogen Diluent with one volume of Chromogen (1mL+1mL) depending of the numbers of samples must be performed, then dilute the Enzyme on the ratio 1:21 in this solution.

**Example:** for about 5 determinations mix 5mL of Chromogen Diluent with 5mL of Chromogen, then add 0,500mL of Enzyme.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

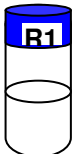

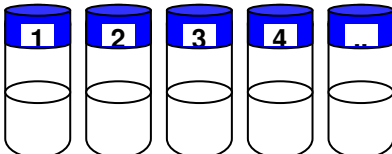
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 3 day at +2-8°C.



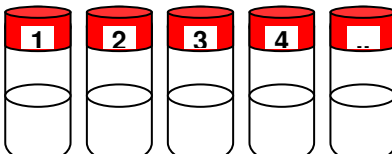
**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

**SAMPLE BLANK**

Working Reagent 1    2000 µL Distilled water    40 µL  	Working Reagent 1    2000 µL Standard            40 µL  	Working Reagent 1    2000 µL Sample                40 µL  
---	--	--

**SAMPLE**


Working Reagent 2    2000 µL Distilled water    40 µL  	Working Reagent 2    2000 µL Standard            40 µL  	Working Reagent 2    2000 µL Sample                40 µL  
---	--	--

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# L-LACTIC ACID

*Reagent for enzymatic assay  
of L-lactic acid on wine*

<b>REF</b>	<b>EN005</b>
	<b>2x50mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare the Working Reagent 2, mix one volume of Chromogen Diluent with one volume of Chromogen (1mL+1mL) depending of the numbers of samples must be performed, then dilute the Enzyme on the ratio 1:21 in this solution.

**Example:** for about 5 determinations mix 5mL of Chromogen Diluent with 5mL of Chromogen, then add 0,500mL of Enzyme.

## WORKING REAGENT STABILITY

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

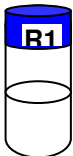

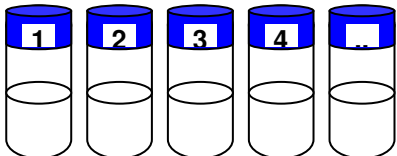
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



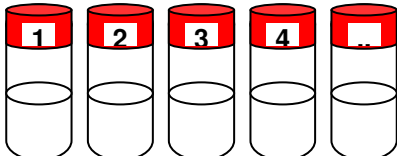
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 3 day at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 40 µL	Working Reagent 1 Standard	2000 µL 40 µL	Working Reagent 1 Sample	2000 µL 40 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 40 µL	Working Reagent 2 Standard	2000 µL 40 µL	Working Reagent 2 Sample	2000 µL 40 µL
					

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# L-MALIC ACID

*Reagent for enzymatic assay  
of L-malic acid on wine*

<b>REF</b>	<b>EN007</b>
	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare the Working Reagent 2, mix one volume of Chromogen Diluent with one volume of Chromogen (1mL+1mL) depending of the numbers of samples must be performed, then dilute the Enzyme on the ratio 1:41 in this solution.

**Example:** for about 5 determinations mix 5mL of Chromogen Diluent with 5mL of Chromogen, then add 0,250mL of Enzyme.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

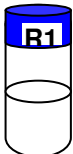

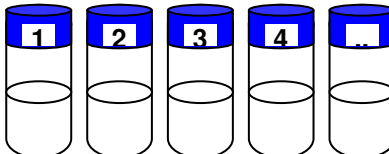
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 5 day at +2-8°C.



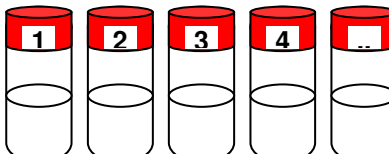
**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

**SAMPLE BLANK**

Working Reagent 1    2000 µL Distilled water      50 µL  	Working Reagent 1    2000 µL Standard                50 µL  	Working Reagent 1    2000 µL Sample                 50 µL  
---	--	---

**SAMPLE**

Working Reagent 2    2000 µL Distilled water      50 µL  	Working Reagent 2    2000 µL Standard                50 µL  	Working Reagent 2    2000 µL Sample                 50 µL  
---	--	---

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# TARTARIC ACID

*Reagent for assay  
of tartaric acid on wine*

REF	<b>EN021W</b>
Σ	<b>2x100mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.  
- Decolorate red wine.

## REAGENT PREPARATION

**Working Reagent 1:** Sample Blank Buffer.

**Working Reagent 2:** To prepare Working Reagent 2, mix four volumes of Reagent 1 with one volume of Reagent 2 (4mL+1mL) depending of the numbers of samples must be performed.

**Example:** for about 5 determinations mix 8mL of Reagent 1 with 2mL of Reagent 2.

## WORKING REAGENT STABILITY

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

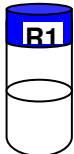

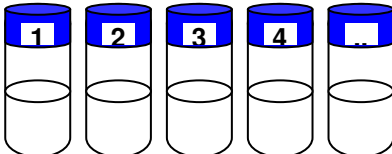
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



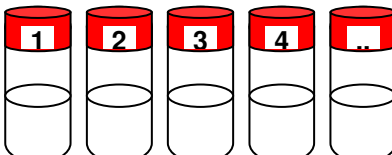
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 5 day at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	2000 µL 80 µL	Working Reagent 1 Standard	2000 µL 80 µL	Working Reagent 1 Sample	2000 µL 80 µL
					

SAMPLE					
Working Reagent 2 Distilled water	2000 µL 80 µL	Working Reagent 2 Standard	2000 µL 80 µL	Working Reagent 2 Sample	2000 µL 80 µL
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# ACETALDHEYDE

*Reagent for assay  
of acetaldehyde on wine*

REF	<b>EN009</b>
Σ	<b>5x20mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Reagent SB .

**Working Reagent 2:** Reconstitute one vial of Reagent 2 with 20 mL of Reagent 1. Shake until completely dissolved. Let it stay 5 minutes at +15-25°C before the use.  
 Reconstitute one vial of Reagent 3 with 0,500 mL of Reagent 4. Shake until completely dissolved. Let it stay 5 minutes at +15-25°C before the use.  
 To prepare Working Reagent 2, mix 0,5 mL of Reagent 3 with 20 mL vials of Reagent 2. Shake until completely dissolved. Let it stay 5 minutes at +15-25°C before the use.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
 Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

**Working Reagent 1:** Stable 30 days at +2-8°C.

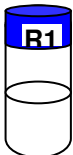

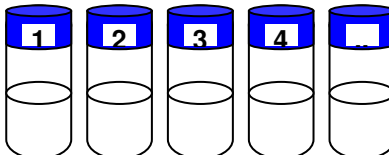
**Working Reagent 2:** Stable 12 hours at +2-8°C.



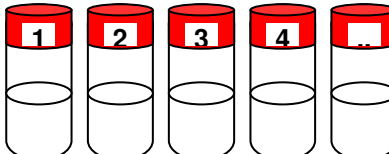
**Reagent 2:** Stable 7 days at +2-8°C.

**Reagent 3:** Stable 7 days at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 100 µL	Working Reagent 1 Standard	2000 µL 100 µL	Working Reagent 1 Sample	2000 µL 100 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 100 µL	Working Reagent 2 Standard	2000 µL 100 µL	Working Reagent 2 Sample	2000 µL 100 µL
					

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# ANTHOCYANS

*Reagent for assay of polyphenols  
anthocyanic compounds on wine*

<b>REF</b>	<b>EN011</b>
	<b>4x50mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent:** Chromogen.

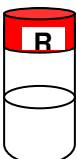
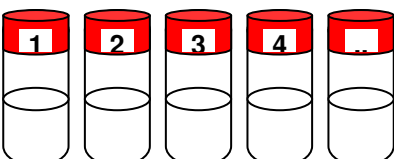
## WORKING REAGENT STABILITY

**Kit:** Store at +15-25°C.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE					
Reagent                      2000 µL Distilled water            100 µL  	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Reagent</td> <td style="text-align: center;">2000 µL</td> </tr> <tr> <td style="text-align: center;">Sample</td> <td style="text-align: center;">100 µL</td> </tr> </table> 	Reagent	2000 µL	Sample	100 µL
Reagent	2000 µL				
Sample	100 µL				

Insert the tube named SAMPLE on the incubator. Wait 5 minutes (set the timer on the instrument), then read. The instrument ask SAMPLE aspiration.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# AMMONIACAL NITROGEN

*Reagent for enzymatic assay  
of ammoniacal nitrogen on wine*

REF	<b>EN008</b>
Σ	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare the Working Reagent 2, dilute Chromogen into Chromogen Diluent with ratio 1:41 (1mL+40mL) depending of the numbers of samples must be performed, then add the Enzyme on the ratio 1:21 in this solution.

**Example:** for about 5 determinations mix 10mL of Chromogen Diluent with 0,250mL of Chromogen, then add 0,500mL of Enzyme.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

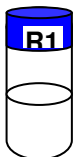
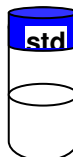
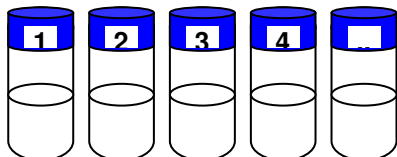
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



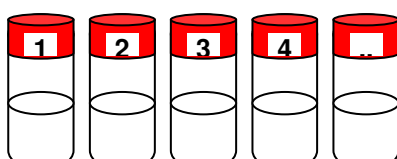
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 10 day at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 50 µL	Working Reagent 1 Standard	2000 µL 50 µL	Working Reagent 1 Sample	2000 µL 50 µL
					

<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 50 µL	Working Reagent 2 Standard	2000 µL 50 µL	Working Reagent 2 Sample	2000 µL 50 µL
					

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# ALPHA-AMMINIC NITROGEN

*Reagent for assay  
of alpha-amminic nitrogen on wine*

REF	<b>EN010</b>
Σ	<b>2x50mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare Working Reagent 2, dilute the Starter into the Chromogen on the ratio 1:41. Shake until completely dissolved.

**Example:** for about 5 determinations mix 0,250 mL of Starter with 10 mL of Chromogen.

## WORKING REAGENT STABILITY

**Kit:** Store at +2-8°C. Do not refrigerate. Stable until the expiry date shown on the label.

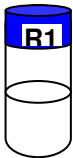

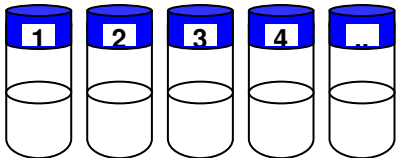
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



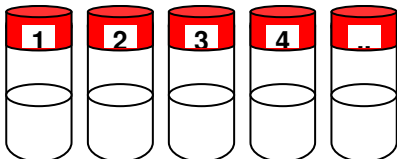
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 1 day at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	2000 µL 50 µL	Working Reagent 1 Standard	2000 µL 50 µL	Working Reagent 1 Sample	2000 µL 50 µL
					


SAMPLE					
Working Reagent 2 Distilled water	2000 µL 50 µL	Working Reagent 2 Standard	2000 µL 50 µL	Working Reagent 2 Sample	2000 µL 50 µL
					

Insert the tube named SAMPLE on the incubator. Wait 5 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# IONIC CALCIUM

*Reagent for assay  
of ionic calcium on wine*

<b>REF</b>	<b>EN020</b>
	<b>2x100mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare Working Reagent 2, mix one volume of Reagent 1 with one volume of Reagent 2 (1R1+1R2) depending on the samples must be performed.

**WORKING REAGENT STABILITY**

**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

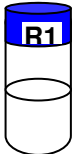

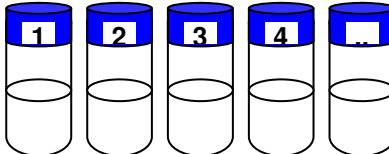
**Working Reagent 1:** Stable 30 days at +15-25°C.

**Working Reagent 2:** Stable 1 day at +15-25°C.



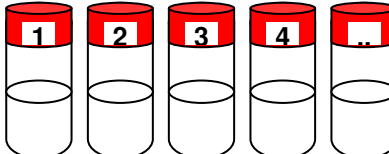
**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

**SAMPLE BLANK**

Working Reagent 1    2000 µL Distilled water        50 µL  	Working Reagent 1    2000 µL Standard                50 µL  	Working Reagent 1    2000 µL Sample                 50 µL  
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**SAMPLE**


Working Reagent 2    2000 µL Distilled water        50 µL  	Working Reagent 2    2000 µL Standard                50 µL  	Working Reagent 2    2000 µL Sample                 50 µL  
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Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# CATECHINS

*Reagent for colorimetric assay  
of catechins on wine*

<b>REF</b>	<b>EN019</b>
	<b>5x20mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare Working Reagent 2, add 20 mL of Chromogen Diluent in one vial of Chromogen. Shake until completely dissolved. **Use gloves!!!**

**WORKING REAGENT STABILITY**

**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

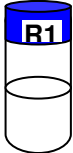
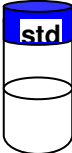
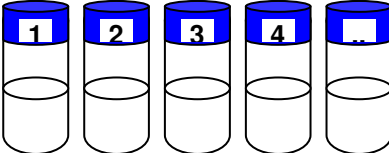
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.


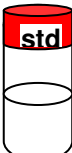
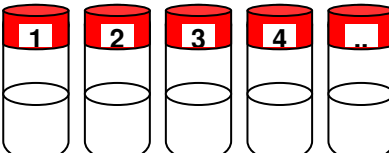
**Working Reagent 1:** Stable 30 days at +15-25°C.

**Working Reagent 2:** Stable 15 days at +15-25°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>		
Working Reagent 1    2000 µL Distilled water        200 µL	Working Reagent 1    2000 µL Standard                200 µL	Working Reagent 1    2000 µL Sample                 200 µL
		


<b>SAMPLE</b>		
Working Reagent 2    2000 µL Distilled water        200 µL	Working Reagent 2    2000 µL Standard                200 µL	Working Reagent 2    2000 µL Sample                 200 µL
		

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# CATECHINS SLR

*Reagent for colorimetric assay  
of catechins on wine*

<b>REF</b>	<b>EN019L</b>
	<b>2x60mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer.

**Working Reagent 2:** To prepare Working Reagent 2, dilute Reagent 2 into Reagent 1 with the ratio 1:4 (ex.: 1mL of R2 + 3 mL of R1). Shake until completely dissolved. **Use gloves!!!**

**WORKING REAGENT STABILITY**

**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

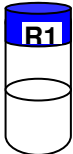
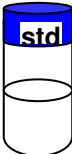
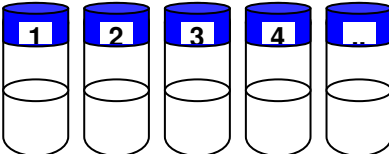
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.


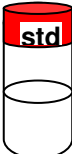
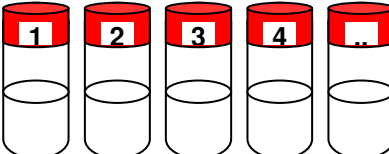
**Working Reagent 1:** Stable 30 days at +15-25°C.

**Working Reagent 2:** Stable 5 days at +15-25°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 200 µL	Working Reagent 1 Standard	2000 µL 200 µL	Working Reagent 1 Sample	2000 µL 200 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 200 µL	Working Reagent 2 Standard	2000 µL 200 µL	Working Reagent 2 Sample	2000 µL 200 µL
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# CHLORIDE

*Reagent for colorimetric assay  
of chloride on wine*

<b>REF</b>	<b>EN012</b>
	<b>2x50mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent 1:** Reagent SB

**Working Reagent 2:** Reagent 1

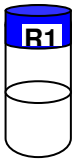

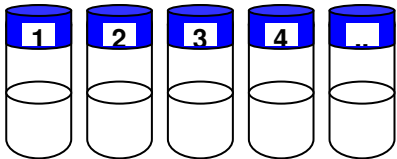
## WORKING REAGENT STABILITY



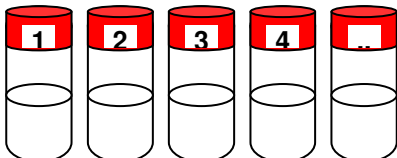
**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	3000 µL 50 µL	Working Reagent 1 Standard	3000 µL 50 µL	Working Reagent 1 Sample	3000 µL 50 µL
					

SAMPLE					
Working Reagent 2 Distilled water	3000 µL 50 µL	Working Reagent 2 Standard	3000 µL 50 µL	Working Reagent 2 Sample	3000 µL 50 µL
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

**COLOUR 420-520-620**  
*Reagent for colorimetric assay  
of colour on red wine*

REF	EN024
Σ	4x100mL

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent:** Reagent

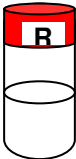
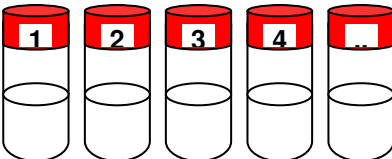
**WORKING REAGENT STABILITY**

**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

**ANALYTICAL PROCEDURE**


Organize a series of tubes so named. So pipette as below.

SAMPLE				
Reagent	2000 µL		Reagent	2000 µL
Distilled water	500 µL		Sample	500 µL
				

Insert the tube named SAMPLE on the incubator. Wait 2 minutes (set the timer on the instrument), then read. The instrument ask the SAMPLE aspiration.  
Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# IONIC IRON

*Reagent for colorimetric assay  
of ionic iron on wine*

<b>REF</b>	<b>EN016</b>
	<b>4x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Reagent 1.

**Working Reagent 2:** To prepare Working Reagent 2, mix four volumes of Reagent 1 with one volume of Reagent 2 (4R1+1R2) depending of the numbers of samples must be performed.

**Example:** for about 5 determinations mix 8mL of Reagent 1 with 2mL of Reagent 2.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

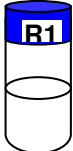
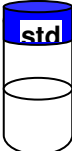
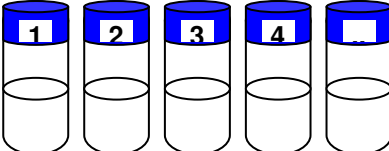
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.


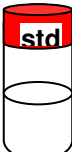
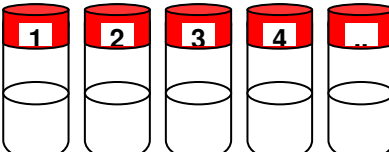
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 30 days at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 200 µL	Working Reagent 1 Standard	2000 µL 200 µL	Working Reagent 1 Sample	2000 µL 200 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 200 µL	Working Reagent 2 Standard	2000 µL 200 µL	Working Reagent 2 Sample	2000 µL 200 µL
					

Insert the tube named SAMPLE on the incubator. Wait 5 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# GLYCEROL

*Reagent for enzymatic assay  
of glycerol on wine*

<b>REF</b>	<b>EN015</b>
	<b>2x50mL</b>

**SAMPLE**

Wine.

- Note:**
- Degas sparkling wine.
  - Dilute the samples 1 : 30 with distilled water ( 1 mL of SAMPLE + 29 mL of distilled water). Use the standard as it is.
  - Multiply the results by 12 (standard value x dilution factor: 0,40 x 30 = 12).

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer.

**Working Reagent 2:** To prepare Working Reagent 2, mix four volumes of Reagent 1 with one volume of Reagent 2 (4R1+1R2) depending of the numbers of samples must be performed.

**Example:** for about 5 determinations mix 8mL of Reagent 1 with 2mL of Reagent 2.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

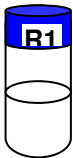

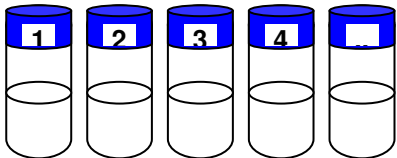
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 20 days at +2-8°C protected from direct light.



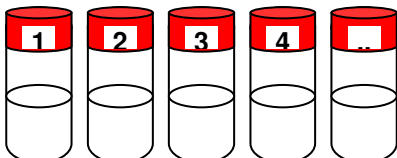
**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

**SAMPLE BLANK**

Working Reagent 1    2000 µL Distilled water      80 µL  	Working Reagent 1    2000 µL Standard                80 µL  	Working Reagent 1    2000 µL Sample                 80 µL  
---	--	---


**SAMPLE**

Working Reagent 2    2000 µL Distilled water      80 µL  	Working Reagent 2    2000 µL Standard                80 µL  	Working Reagent 2    2000 µL Sample                 80 µL  
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Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.  
Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# GLUCOSE

*Reagent for enzymatic assay  
of glucose on wine*

<b>REF</b>	<b>EN140</b>
	<b>2x50mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent 1:** Reagent SB .

**Working Reagent 2:** To prepare Working Reagent 2, dilute Reagent 2 into Reagent 1 with a ratio 1:41.

**Example:** for about 5 determinations mix 10mL of Reagent 1 with 0,250mL of Reagent 2.

## WORKING REAGENT STABILITY

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

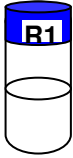
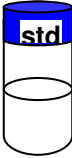
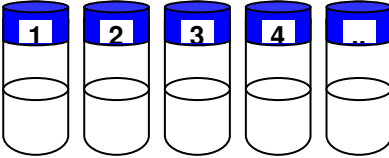
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.


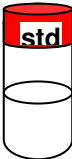
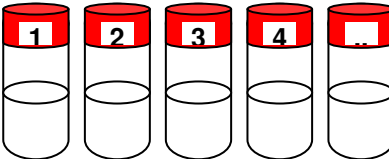
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 5 days at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	2000 µL 40 µL	Working Reagent 1 Standard	2000 µL 40 µL	Working Reagent 1 Sample	2000 µL 40 µL
					

SAMPLE					
Working Reagent 2 Distilled water	2000 µL 40 µL	Working Reagent 2 Standard	2000 µL 40 µL	Working Reagent 2 Sample	2000 µL 40 µL
					

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# GLUCOSE + FRUCTOSE

*Reagent for enzymatic assay  
of glucose+fructose on wine*

REF	<b>EN014</b>
Σ	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Reagent SB .

**Working Reagent 2:** To prepare Working Reagent 2, dilute Reagent 2 into Reagent 1 with a ratio 1:41.

**Example:** for about 5 determinations mix 10mL of Reagent 1 with 0,250mL of Reagent 2.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

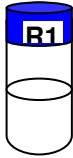

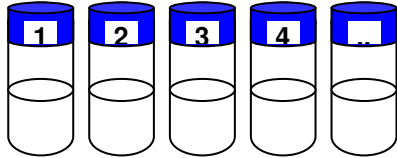
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



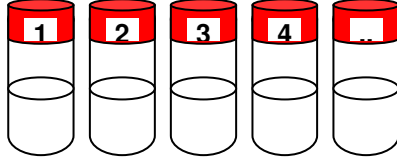
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 5 days at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 40 µL	Working Reagent 1 Standard	2000 µL 40 µL	Working Reagent 1 Sample	2000 µL 40 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 40 µL	Working Reagent 2 Standard	2000 µL 40 µL	Working Reagent 2 Sample	2000 µL 40 µL
					

Insert the tube named SAMPLE on the incubator. Wait 15 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# MAGNESIUM

*Reagent for colorimetric assay  
of magnesium on wine*

<b>REF</b>	<b>EN025</b>
	<b>4x100mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.

## REAGENT PREPARATION

**Working Reagent 1:** To prepare Working Reagent 1, dilute Concentrate Buffer 1:2(1mL+1mL) with distilled water depending on the number of samples must be performed.

**Working Reagent 2:** Chromogen.

## WORKING REAGENT STABILITY

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

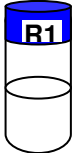

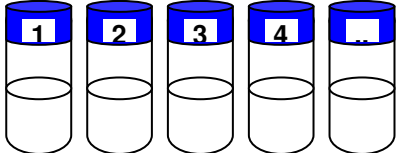
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



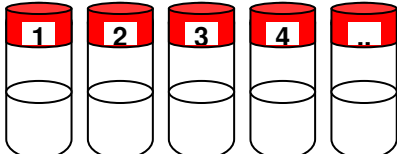
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 30 days at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	3000 µL 50 µL	Working Reagent 1 Standard	3000 µL 50 µL	Working Reagent 1 Sample	3000 µL 50 µL
					

SAMPLE					
Working Reagent 2 Distilled water	3000 µL 50 µL	Working Reagent 2 Standard	3000 µL 50 µL	Working Reagent 2 Sample	3000 µL 50 µL
					

Insert the tube named SAMPLE on the incubator. Wait 5 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.  
Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# TOTAL POLYPHENOLS

*Reagent for colorimetric assay  
of total polyphenols on wine*

REF	<b>EN018</b>
Σ	<b>3x100mL</b>

**SAMPLE**

Wine.

*Suggested dilution:*

- white wine: without any dilution (SAMPLE volume 100 µL)
- red wine: without any dilution (SAMPLE volume 20 µL)
- strong red wine: 3 dilutions (SAMPLE volume 20 µL)

**REAGENT PREPARATION**

**Working Reagent 1:** Chromogen .

**Working Reagent 2:** Alkaline Buffer

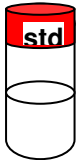
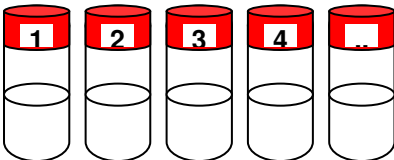
**WORKING REAGENT STABILITY**

**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE</b>	
<p>Working reagent 1      2000 µL Standard                20 µL (100 µL) Wait 1 minute, then add: Working reagent 2      1000 µL</p> <div style="text-align: center; margin-top: 10px;">  </div>	<p>Working reagent 1      2000 µL Sample                    20 µL (100 µL) Wait 1 minute, then add: Working reagent 2      1000 µL</p> <div style="text-align: center; margin-top: 10px;">  </div>

Insert the tube named SAMPLE on the incubator. Wait 30 minutes (set the timer on the instrument), then read. The instrument ask the SAMPLE aspiration.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

**At the end of the work wash the flow cell with Neutralizer.**

# POTASSIUM

*Reagent for semi-quantitative turbidimetric assay of potassium on wine*

REF	<b>EN026</b>
Σ	<b>1x100mL</b>

## SAMPLE

Wine.

**Note:** - Degas sparkling wine.  
 - Dilute the samples 1:10 with distilled water ( 1 mL of Sample + 10 mL of distilled water).

## REAGENT PREPARATION

**Working Reagent 1:** Reagent SB

**Working Reagent 2:** Reagent 1

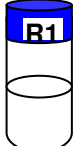

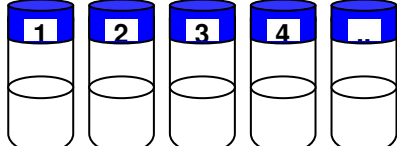
## WORKING REAGENT STABILITY



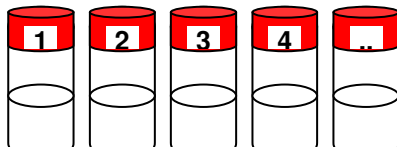
**Kit:** Store at +15-25°C. Do not refrigerate.  
 Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

SAMPLE BLANK					
Working Reagent 1 Distilled water	2000 µL 100 µL	Working Reagent 1 Standard	2000 µL 100 µL	Working Reagent 1 Sample	2000 µL 100 µL
					


SAMPLE					
Working Reagent 2 Distilled water	2000 µL 100 µL	Working Reagent 2 Standard	2000 µL 100 µL	Working Reagent 2 Sample	2000 µL 100 µL
					

Insert the tube named SAMPLE on the incubator. Wait 5 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# COPPER

*Reagent for colorimetric assay  
of copper on wine*

<b>REF</b>	<b>EN013</b>
	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.  
- Not is possible to assay on red wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Reagent SB .

**Working Reagent 2:** To prepare Working Reagent 2, mix one volume of Reagent 1 with one volume of Reagent2 (1R1+1R2) depending on the number of samples must be performed.

**Attention:** at temperature lower than +10-15°C the Reagent 1 and the Reagent SB is tending to precipitate. Warm these reagents at +37° before the use.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

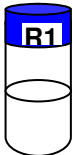
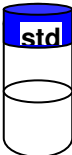
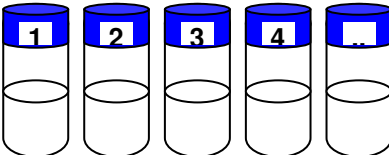
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.


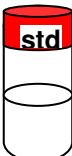
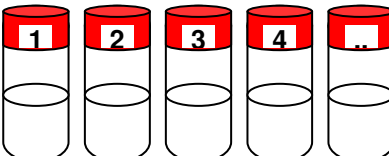
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 22 days at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>		
Working Reagent 1    2000 µL Distilled water        300 µL	Working Reagent 1    2000 µL Standard                300 µL	Working Reagent 1    2000 µL Sample                 300 µL
		


<b>SAMPLE</b>		
Working Reagent 2    2000 µL Distilled water        300 µL	Working Reagent 2    2000 µL Standard                300 µL	Working Reagent 2    2000 µL Sample                 300 µL
		

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# FREE SO<sub>2</sub>

*Reagent for colorimetric assay  
of free SO<sub>2</sub> on wine*

<b>REF</b>	<b>EN022</b>
	<b>1x120mL</b>

## SAMPLE

Wine.

## REAGENT PREPARATION

**Working Reagent 1:** To prepare Working Reagent 1, mix 10 mL of Acid Diluent with 0,1mL of Oxidant and shake until completely dissolved. Add 1mL of Concentrate Chromogen and 1mL of Starter.  
(10mL Acid Diluent + 0,1mL Oxidant + 1mL Chromogen conc. + 1mL Starter)

**Working Reagent 2:** To prepare Working Reagent 1, mix 10 mL of Acid Diluent 1mL of Concentrate Chromogen and 1mL of Starter.  
(10mL Acid Diluent + 1mL Chromogen conc. + 1mL Starter)

## WORKING REAGENT STABILITY

**Kit:** Store at +2-8°C.  
Stable until the expiry date shown on the label.

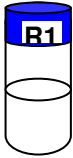

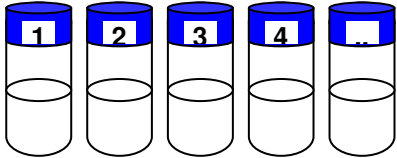
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



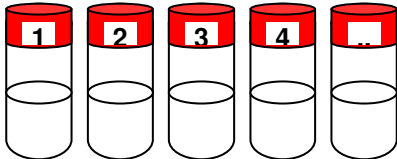
**Working Reagent 1:** Stable 15-20 days at +2-8°C.

**Working Reagent 2:** Stable 7 days at +2-8°C.

## ANALYTICAL PROCEDURE

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 50 µL	Working Reagent 1 Standard	2000 µL 50 µL	Working Reagent 1 Sample	2000 µL 50 µL
					


<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 50 µL	Working Reagent 2 Standard	2000 µL 50 µL	Working Reagent 2 Sample	2000 µL 50 µL
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# TOTAL SO<sub>2</sub>

*Reagent for colorimetric assay  
of total SO<sub>2</sub> on wine*

<b>REF</b>	<b>EN023</b>
	<b>2x100mL</b>

**SAMPLE**

Wine.

**Note:** - Not is possible to assay on red wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer

**Working Reagent 2:** Chromogen

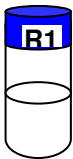

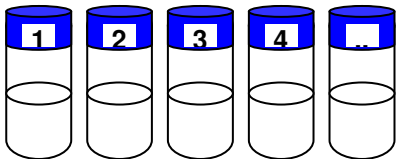
**WORKING REAGENT STABILITY**



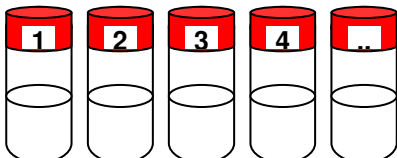
**Kit:** Store at +15-25°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.


<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 50 µL	Working Reagent 1 Standard	2000 µL 50 µL	Working Reagent 1 Sample	2000 µL 50 µL
					

<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 50 µL	Working Reagent 2 Standard	2000 µL 50 µL	Working Reagent 2 Sample	2000 µL 50 µL
					

Insert the tube named SAMPLE on the incubator. Wait 10 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.  
Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# UREA

**Reagent for enzymatic assay  
of urea on wine**

<b>REF</b>	<b>EN055</b>
	<b>2x50mL</b>

**SAMPLE**

Wine.

**Note:** - Degas sparkling wine.

**REAGENT PREPARATION**

**Working Reagent 1:** Sample Blank Buffer .

**Working Reagent 2:** To prepare Working Reagent 2, mix four volumes of Reagent 1 with one volume of Reagent 2 (4R1+1R2) depending of the numbers of samples must be performed.

**Example:** for about 5 determinations mix 8 mL of Reagent 1 with 2 mL of Reagent 2.

**WORKING REAGENT STABILITY**

**Kit:** Store at +2-8°C. Do not refrigerate.  
Stable until the expiry date shown on the label.

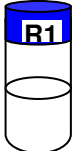

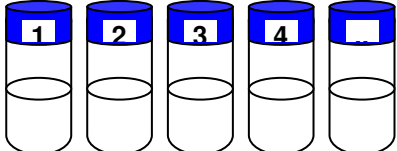
**Opened reagents:** The Reagents are stable after opening until the expiry date shown on the bottles when are protected from direct light, tightly closed, and stored at reported temperature.



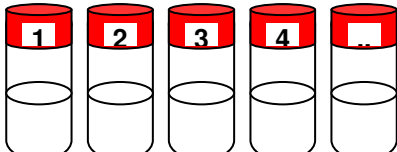
**Working Reagent 1:** Stable 30 days at +2-8°C.

**Working Reagent 2:** Stable 5 days at +2-8°C.

**ANALYTICAL PROCEDURE**

Organize a series of tubes so named. So pipette as below.

<b>SAMPLE BLANK</b>					
Working Reagent 1 Distilled water	2000 µL 180 µL	Working Reagent 1 Standard	2000 µL 180 µL	Working Reagent 1 Sample	2000 µL 180 µL
					

<b>SAMPLE</b>					
Working Reagent 2 Distilled water	2000 µL 180 µL	Working Reagent 2 Standard	2000 µL 180 µL	Working Reagent 2 Sample	2000 µL 180 µL
					

Insert the tube named SAMPLE on the incubator. Wait 15-20 minutes (set the timer on the instrument), then read. The instrument ask as first the SAMPLE BLANK aspiration, and after the SAMPLE.

Between each aspiration the operator can choose whether or not to rinse with distilled water the flow cell.

# IPT – Total Polyphenols Index

**SAMPLE**

Wine.

**ANALYTICAL PROCEDURE**

Switch on the instrument 25 minutes before the execution of the method to stabilize the lamp and the incubator temperature. Digit **1** and select the method, then digit **F2** and wait until the instrument reach the working temperature. Follow as show:

HYD-270150 v3.03 S2UV  
WINEMATIC

- 1-EXECUTE METHOD**
- 2-MODIFY METHOD
- 3-STORED RESULTS
- 4-READ ABS
- 5-SETTINGS
- 6-FLOW CELL WASH



**SELECT METHOD:**

- 1-IPT**
- 2-SLOT1
- 3-SLOT2
- 4-SLOT3
- 5-SLOT4

**F1 - SEARCH ID:**  
**NEXT →**



**USE FLOW CELL ?**

**F1/GO-YES    F2-NO**



**METHOD:    IPT**  
**ID:            ID N°29**

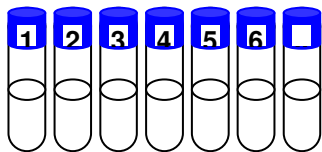
**PLEASE WAIT TEMPERATURE**  
**TEMPERATURE**  
**25.0 °C**

**F1/GO-IGNORE    ESC-ABORT**

Start assay



Prepare a series of *quartz cuvettes or special plastic (UV type)* as named. Then pipette as follow:



**SAMPLE**

Distilled water: 5000 µL  
Sample: 50 µL



**ABS**  
**READING**





customer care

info@gibertini.com  
Tel. (++39) 023541434

ISO 9001:2015



LAT N° 094

**GIBERTINI**

**ELETTRONICA s.r.l.**

Via Bellini 37  
20026 Novate Mil.se  
Milano (Italy)

Tel. (++39) 02 3541434  
Fax (++39) 02 3541438  
www.gibertini.com  
sales@gibertini.com