

## **ENZYMATIC ANALYZER**

www.tarainstruments.com



+91 74860 47646



TARA International



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Tarainstruments





Enzymatic analysis based on high quality purified enzymes and allow precise and specific measurements for the charactrization of compounds even in complex matrices, since the spectrophometric absorbance reading is correlated to the concentration of the various analytes.

# Steroglass Enzymatic methods have been approved and validated by International Organizations such as:

- ✓ **ISO** (International Standardization Organization)
- ✓ **OIV** (International organization of vine and wine)
- ✓ AOAC (American Association of Analytical Chemists)
- ✓ IFU (International Federation of fruit juice producers)
- ✓ IDF (International Dairy Federation)



## Features of Enzymatic and Colorimetric test kits:

- Liquid and ready use
- Accurate and repeatable data
- Fast analysis, especially if used with automatic analyzers
- High specificity
- Low analysis costs
- Long shelf-life (about 24 Months)
- Use of separate and multi-parametric standards

## **Advantages of Automation:**

- ✓ Direct- reading Analyzer
- ✓ Lowest possible consumption of reagents
- ✓ Reduced Analysis Time
- ✓ Reduced Cost
- ✓ High Precision and Reproducibility

Steroglass offers a number of solutions that can satisfy any FEB laboratory needs, such as:

- -Universal Enzymatic and colorimetric test kits
- -Automatic and semi-automatic analyzers

# Steroglass range of Enzymatic and Colorimetric test kits:

	✓ Acetic		
	✓ Ascorbic		
	✓ Citric & Isocitric		
Organic	✓ Gluconic		
Acids	✓ D & L lactic		
	D & L malic		
	✓ Pyruvic		
	✓ Tartaric		
	✓ Glucose		
Sugars	✓ Fructose		
	✓ Sucrose		
	✓ Calcium		
lons and	✓ Iron		
Metals	✓ Magnesium		
ivictais	✓ Potassium		
	✓ Copper		
t	✓ Anthocyanins		
Phenolic	✓ Catechins		
compounds	✓ Polyphenols		
	✓ Amino & Amoniacal		
C	Nitrogen		
<b>-</b>	✓ Chlorides		
Other	✓ Colour (Wine)		
compounds	✓ Ethanol		
	✓ Glycerin		

✓ Free & Total Sulphur

Dioxide





## **Enzymatic Analyzer Main Application Fields:**

#### Wine



- Harvest and grapes/musts collection: Glucose/ Fructose, Tartaric acid, d Gluconic acid, L Malic acid, Polyphenols, Anthocyanins, Catechins, Potassium analyses.
- Fermentation: Glucose/Fructose, Amino & Ammoniacal Nitrogen, Ethanol, Acetic Aldehyde, Acetic Acid (Volatile Acidity), Glycerol, Copper, L Malic Acid, D & L Lactic Acid, Free & Total 502 analyses.
- > Stabilization and pre-Bottling Monitoring: Ascorbic Acid, D Malic Acid, Anthocyanins, Calcium, Catechins, Colour, Glycerol, Iron, Polyphenols, Copper, Sucrose, Protein stability analyses.

## Juices, Purees and soft drinks



- **Collection and Quality control:**Glucose/ Fructose, Citric & Isocitric acid, D & L- Malic acid, Polyphenols analyses.
- Monitoring of Non-desired Fermentation: D & L Malic Acid, Pyruvic Acid, Ethanol analyses.

### Yeast and Bacteria cultivation



➤ **During all Fermentation Processes:** Ammonia & A - amino Nitrogen, Ethanol, L – Lactic Acid, Acetic Acid and Acetaldehyde analyses.

### **Dairy products**



Raw Material & throughout the production cycle: Lactic Acid, Pyruvic Acid, Citric Acid, Gluconic Acid, Acetic Acid, Glucose, Lactose (also on Lactose free products), Calcium, Chlorides analyses.

## **Steroglass Hyper lab Series**

**Hyperlab** is a family of automatic multi-parametric analyzer with flexible random access, i.e. it can fully perform all the manual operating procedures automatically. Hyperlab automation guarantees the greatest data results accuracy and precision, thus significantly reducing analysis costs by about seven times when compared with manual methodologies.

## **Advantages of Hyperlab:**

<b>√</b>	Great accuracy and precision	✓	Display of reagents and samples position, volume and no. of analysis
<b>√</b>	Cost is seven time lower than manual method	✓	Automatic control of reaction cuvettes status
<b>✓</b>	Simultaneous automatic use of 3 reagents	✓	Unlimited work list
<b>√</b>	Display of kinetics	✓	Several calibration functions

## **Automatic analyzer Hyperlab PLUS**

- About 200 analyses/hour
- 60 positions
- 30 positions with refrigerated tray
- Glass ceramics stroke needle with anti-crash and capacitance sensors
- Cooled reagents plate
- 6 dispensing needles for washing solution, 6 sucking needles, 1 drying needle, 8 washing cycles for each cuvette





## **Automatic analyzer Hyperlab BASIC**

- About 150 analyses/hour
- 46 cups of 30ml samples positions
- 26 positions with insulated reagent plate
- Stainless steel needle equipped with capacitive level sensor anti breakage locking system
- 4 dispensing needles for washing solution, 5 sucking needles, 1 drying needle, 6 washing cycles for each cuvette.

## **Automatic analyzer Hyperlab SMART**

- About 140 analyses/hour
- Insulated reagent plate
- 10 samples and 20 reagents bottle, otherwise 20 samples and 10 reagents bottle
- Small size :  $38 \times 60 \times 35$  cm
- Stainless steel needle equipped with capacitive level sensor anti breakage locking system
- 4 reaction segments, each with 24 disposable cuvettes
- Maintenance free





**Hyperlab PLUS, Hyperlab BASIC & Hyperlab SMART** analyzer already includes: Software HI, starter kit, connecting cables and tanks.

## Semi-automatic Multiparameteric Analyzer One





**ONE** analyzer has been designed for **Enzymatic and Colorimetric** analyses in the Dairy, Food and Beverage field. Very useful for controlling the quality of every phase of production, ONE, with is compact and smart shape, is already equipped with a wide range of preloaded applications providing a simple and intuitive interface through a graphic display that guides user step by step during the analysis.

#### **ANALYTICAL METHODS:**

- End point
- Kinetics
- Fixed time
- Algorithms: linear and polynomial
- Colour determination for oenological application at 420 + 520 + 620 nm

#### **MAIN FEATURES & TECHNICAL SPECIFICATIONS**

- About 60 preloaded methods optimized with Steroglass kits (up 132 programmable methods)
- Easy Software with step by step procedures to support user during analyses
- 9 positions thermal block for cuvette incubation (25-45°C) to perform analyses at right temperature
- Data shown on display and integrated printer
- Results given in absorbance value and even directly in concentration
- Languages current available: Italian, English
- Filter selection: automatic, N°8 interferential filters: 340, 420, 492, 520, 578, 620, 650, 700nm
- Photometric range: 0 3.0 O.D.
- Dimensions:  $1 \times d \times h$  (9 × 35 × 18 cm)
- Weight: ~ 5 Kg

#### **ONE, ACCESSORIES AND SPARE PARTS**

**KAMW008337** CUVETTE POLIST.4,5ml 10mm 4 F 100pcs 1960

KAMY022672 CUVETTE HOLDER 12POS.

**SQRR076387** ONE LAMP

**SQRR081171** ONE PAPER FOR TERMAL PRINTER 10pcs





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info@tarainstruments.com



312 NOTUS IT Park, Sarabhai Campus, Nr. Genda Circle, Vadodara 390007, Guj. INDIA