

ENZYMATIC ANALYSIS



PRODUCT OVERVIEW

PPERLAB

STEROG
LASS
THE
COMPANY

The Steroglass® company in a nutshell

Steroglass® is an Italian company founded in 1959 that develops, manufactures and supplies scientific instruments for diagnostics, biotechnology and environmental chemistry industries.

The company is a world leader in supplying equipment for analysis of food and wine, and thanks to its utmost expertise it develops, produces and markets highly innovative solutions for laboratory analysis thus optimizing both production processes and quality control methods.



STEROG
LASS
THE
COMPANY



CHEMISTRY BITES



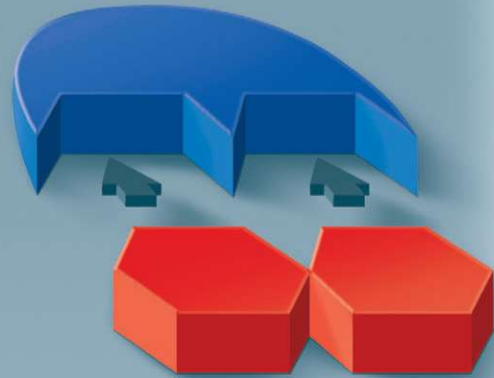
Enzymatic and colorimetric kits are widely used in the analysis of food products such as wine, fruit juices, beer, dairy products, eggs and meat as well as for control of fermentation processes of yeast and bacteria by detecting the content of various parameters such as sugars, organic acids and other components e.g. sulfites, phenolic compounds and metals.

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

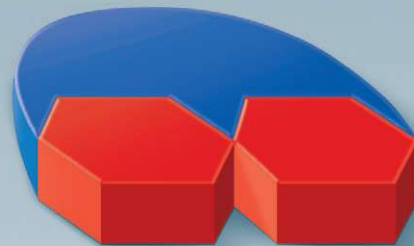
Used for numerous applications, the main parameters analyzed are significant as regards stability, genuineness, transformation and toxicity of the products.

ENZYME

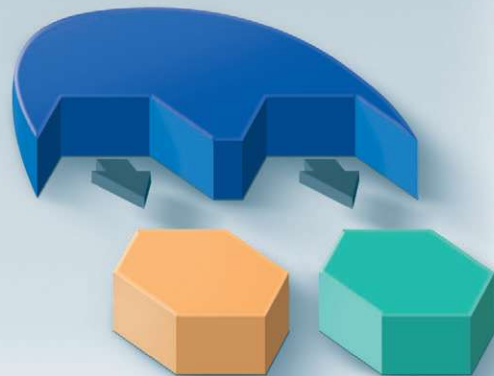
SUBSTRATE



ENZYME-SUBSTRATE
ESEMBLE



ENZYME AND
REACTION PRODUCTS



ENZYMATIC KITS



Several 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)
- EBC (European Brewery Convention)

As a leading company STEROGLOSS® 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.

Enzymatic and colorimetric kits allow to save time by improving control effectiveness and analytical safety.

Other features:

- Liquid and ready to use;
- Accurate and repeatable data;
- Fast analyses, especially if used with automatic analyzers such as one of the Steroglass Hyperlab instruments;
- High specificity in determination of the various analytes;
 - Low analysis costs;
 - Long shelf-life (about 24 months);
- Use of separate and multi-parametric standards.



ENZYMATIC AND COLORIMETRIC KIT

MAIN PARAMETERS

ORGANIC ACIDS

- Acetic •Ascorbic
- Citric and Isocitric
 - Gluconic
- D & L Lactic
- D & L Malic
- Pyruvic •Tartaric

SUGARS

- Glucose
- Fructose
- Sucrose

IONS AND METALS

- Calcium •Iron
- Magnesium
- Potassium •Copper

PHENOLIC COMPOUNDS

- Anthocyanins
- Catechins
- Polyphenols

OTHER COMPOUNDS

- Amino and Ammoniacal Nitrogen (Ran)
- Chlorides •Colour (wine)
- Ethanol •Glycerin
- Free and total Sulfur Dioxide

CUSTOMER CARE



Kit delivery in 24/48
hours from order



Technical and
application assistance



Long shelf-life
(24 months)

MULTI-PARAMETRIC ANALYZERS



ONE FOOD&BEVERAGES
ANALYZER



- About 60 pre-loaded methods, optimized with Steroglass kits;
- User-friendly software thanks to a step-by-step guide;
- A 9-position well designed for incubation reading cuvettes, temperature can be set from 25°C to 45°C;
- Results reading of both absorbance and concentration on display screen can be printed by means of an integrated printer;
- Reagent blank and calibration of methods can be saved in memory.

ONE analyzer has been designed to perform a number of enzymatic analyses in the food & beverage industries. Very useful for controlling the quality of each step of the whole production process, One comes with a wide range of methods which provide a simple and intuitive interface by means of a graphic display that guides the user in the analysis being performed.



THE ADVANTAGES OF AUTOMATION



Direct-reading analyzers, such as Steroglass® **Hyperlab** series, ensure the lowest possible consumption of reagent thus allowing considerable saving in operating costs. In fact, they can perform independently all the operations required by the manual analytical procedures: the sampling arm collects the sample as well as the various reagents. Both the sample and reagents are then dispensed into a reaction cuvette where, at a constant and controlled temperature, remain there the time needed to complete the reaction.

REDUCED ANALYSIS TIME

In a few seconds, user can prepare the samples and start the desired analyses. Once the instrument is switched on, it

operates independently allowing different analyses to be carried out.

REDUCED COSTS

Only a few μl of sample and reagent needed, reducing analytical costs significantly.

HIGH PRECISION AND REPRODUCIBILITY

Modern automatic dilution systems ensure high accuracy in dispensing, preventing any possible human error as well as improving reproducibility results.

AUTOMATIC MULTI-PARAMETRIC ANALYZERS



Hyperlab automation guarantees great accuracy and precision of results, with analysis costs seven times lower than those of manual methods since minimum amounts of reagents for each single determination are required.

The HI software is exclusive to **Hyperlab** series analyzers and has very useful features, such as:

- Simultaneous automatic use of 3 reagents per method, no manual preparation of reagents needed;
- Display of kinetics of the analyses being carried out, an essential function to verify their correct results and reach the reaction plateau;
- Display of reagents and samples position, their volumes and number of analyses to be performed;
- Display and automatic control of reaction cuvettes status;
- Unlimited work lists can be made and used simultaneously;
- Several calibration functions (automatic with standard, reagent blank subtraction, from 1 to 8 calibrations per test, linear and non-linear regression, etc.) and data processing functions (recalculation of results, to be matched to one or more reference samples, display of the new regression line generated by the recalculation, etc. ...)

AUTOMATIC MULTI-PARAMETRIC ANALYZERS



HYPERLAB
Multiparametric Analyzer



Hyperlab Plus Automatic Analyzer

The most popular automatic analyzer for food and wine:

- 180 analyses / hour;
- 60 positions;
- 30 positions with refrigerated tray;
- Anti-crash glass ceramic needle equipped with capacitive level sensor;
- 8-cycles washing station.

Hyperlab Basic Automatic Analyzer

Robust and resistant for high productivity:

- 150 analyses / hour;
- 46 positions;
- 26 positions with insulated reagent plate;
- Stainless-steel needle equipped with capacitive level sensor and anti-breakage locking system;
- 6-cycles washing station.

Hyperlab Smart Automatic Analyzer

The revolution of enzymatic analysis:

- 140 analyses/hour;
- Insulated reagent plate;
- 2 versions:
 - 10 positions for samples and 20 positions for reagents;
 - 20 positions for samples and 10 positions for reagents;
- Small size: 38x60x35 cm;
- Stainless-steel needle equipped with capacitive level sensor and anti-breakage locking system;
- 4 reaction segments, each with 24 disposable cuvettes;
- Maintenance-free.





COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

ENZYMATIC ANALYSIS

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