

LALLZYME™ ENZYMES





THE ADVANTAGES OF USING ENZYMES

- Improve quality
- Improve productivity
- Reduce production costs
- Environmental friendliness



**A SMALL ADDITION
OF THE RIGHT ENZYME
CAN SIGNIFICANTLY IMPROVE
YOUR WAY OF WORKING**

LALLEMAND OENOLOGY

As a world-leading expert in wine biotechnologies, we develop solutions that ensure the control of winemaking processes and optimize the quality of wines according to desired sensory profiles.

LALLEMAND EXPERTISE

LALLZYME™ enzymes are Lallemand recipes, formulated based on the results of research and trials performed by Lallemand and in collaboration with its research partners worldwide

INNOVATION

To meet the new demands of the wine industry and keep up with the latest winemaking protocols and technologies

SUPPORT

Lallemand technical staff is available to advise on the best use of LALLZYME™ enzymes and to develop application protocols in collaboration with their customers

EXCELLENCE

Only the most efficient raw materials and the best combination for each specific application, in compliance with the most complete current legislation

EFFICIENCY

LALLZYME™ is a complete range of enzymes with high activity, able to realize what they promise with low dosage and reasonably short reaction time



LALLZYME™

ENZYME	FORMULATION	APPLICATION	DOSAGE
CUVÉE BLANC	GRANULATED	SKIN MACERATION	1.5 – 2.5 g/100 kg
CUVÉE ROUGE	GRANULATED	SKIN MACERATION	2 – 3 g/100 kg
HP	LIQUID	PRESSING	1.5 – 3 mL/100 kg
HC	GRANULATED	SETTLING, FLOTATION	1 – 2 g/hL
C-MAX	GRANULATED	SETTLING, FLOTATION	0.5 – 2 g/hL
EX	GRANULATED	MACERATION	2 – 3 g/100 kg
EX-V	GRANULATED	MACERATION	1.5 – 3 g/100 kg
OE	GRANULATED	MACERATION	1.5 – 2.5 g/100 kg
THERMO	LIQUID	THERMOVINIFICATION, FLASH DETENTE	1.5 – 3 mL/100 kg
MMX	GRANULATED	AGEING ON LEES, BOTRYTIZED GRAPES	2.5 – 4 g/hL
BETA	GRANULATED	AROMA RELEASE	3 – 5 g/hL
LALLZYME™			
PROCESS CLAR	GRANULATED	SETTLING, FLOTATION	1 – 3 g/hL
PROCESS COLOR	GRANULATED	MACERATION	1 – 3 g/100 kg
PROCESS GLUCAN	GRANULATED	BOTRYTIZED GRAPES	4 – 6 g/hL
LALLZYME™ SPECIAL			
CIDER L	LIQUID	SETTLING	2 – 5 mL/hL
FRUIT	LIQUID	SETTLING	2 – 5 mL/hL

LALLZYME™

SPECIAL BENEFIT	PACKAGING
Fast maceration for more aroma complexity	100 g
Fast maceration for more color extraction and aroma complexity	100 g
Easier pressing and more yield and quality of the must	1 Kg
Efficient depectinization at low dosage and short time	100 g
Complete depectinization also in extreme conditions	250 g
Color and polyphenols extraction under short lenght macerations	100 g
Intense color and polyphenols extraction for higher end structured wines	100 g
Balanced, intense color and polyphenols extraction for long macerations	100 g
Easier winemaking process and high wine quality for thermo-treated red grapes	1 Kg
more complete and faster ageing on lees, degradation of glucans from <i>Botrytis</i>	100 g
Complete activities pool for aroma revelation	100 g
PROCESS	
Complete depectinization in large volumes tanks and in flotation	1 Kg
Efficient maceration in large volume tanks	1 Kg - 10 Kg
Easier filtration in large volume tanks	1 Kg
AL APPLICATIONS	
Efficient and fast depectinization for cider production	1 Kg
Highly adaptable pectinase to the most varied protocols and fruits	1 Kg - 20 Kg

QUALITY AND SAFETY

QUALITY MANAGEMENT SYSTEM	YES	NO
ISO 9001 certified facilities	✓	
ISO 14001	✓	
HACCP program	✓	
GFSI certified facilities	✓	
Good Manufacturing Practices (GMP)	✓	
Compliance to Environment regulation	✓	
Business ethics policy	✓	
Compliance to labor laws	✓	

WHAT SUPPORT PROGRAMS ARE IN PLACE TO ENSURE QUALITY AND FOOD SAFETY TARGETS OF OUR PRODUCTS ?

- Documented Quality Policy
- Documented Quality System
- Food Safety Plan
- Hygiene and Sanitation (GMP)
- Hazard Analysis Program (including allergen control)
- Training programs
- Supplier approval, raw material specifications
- Production/Process control
- Equipment maintenance and calibration
- Quality Control
- Management of non-conforming product
- Customer Complaints procedure
- Crisis Management
- Product Traceability and Recall
- Food Defense Program
- Pest Control

RAW MATERIAL AND PRODUCT CONFORMANCE	YES	NO
Approved Suppliers	✓	
Raw material specifications & Sampling plant	✓	
Good Manufacturing Practices (GMP)	✓	

PRODUCT SPECIFICATIONS	YES	NO
OUR PRODUCTS ARE		
In compliance with OIV codex specifications	✓	
In compliance with application regulations	✓	
Allergen FREE	✓	
Genetically Modified Organism (GMO)		✓
FOR PRODUCTION PROCESS, DO WE USE :		
Nanotechnologies		✓
Irradiation		✓
Sewage sludge		✓
Preservatives		✓
Animal by-product		✓
Material securely packaged	✓	
Control of Non-conforming product	✓	
PRODUCT DOCUMENTATION AVAILABLE:		
Product Quality specifications (OIV Codex)	✓	
General declaration about specification	✓	
Safety Data Sheet (SDS)	✓	
Certificate of conformity (COC)	✓	
Certificate of analysis (COA)	✓	
TRACEABILITY		
Product Traceability and Product Recall	✓	
Production batch record	✓	
Unique lot number	✓	

PROCESS	LALLZYME™
LALLZYME™ FOR WHITE AND ROSE' WINES	
Skin maceration	CUVÉE BLANC
Press	HP
Settling/flotation	HC, PROCESS CLAR
Settling in difficult conditions	C-MAX
LALLZYME™ FOR RED WINES	
Cold soaking	CUVÉE ROUGE
Short-medium maceration	EX, PROCESS COLOR
Medium-long maceration	EX-V, OE
Thermovinification/flash détente	THERMO
LALLZYME™ FOR SPECIAL APPLICATIONS	
Ageing on lees	MMX
Botrytized grapes	MMX, PROCESS GLUCAN
Aroma revelation	BETA
LALLZYME™ FOR CIDER AND FRUIT JUICE	
Apple juice depectinization for cider	CIDER L
Fruit juice depectinization	FRUIT

LALLZYME™

COMPLETE,
HIGHLY PERFORMING
ENZYME RANGE
FOR WINEMAKING



Visionary biological solution

Being original is key to your success. At Lallemand Oenology, we apply our passion for innovation, maximize our skill in production and share our expertise, to select and develop natural microbiological solutions. Dedicated to the individuality of your wine, we support your originality, we cultivate our own.