



Impactful Products

We develop impactful solutions to support sustainable viticulture and winemaking

Our natural solutions optimise winemaking processes, adding value to wines for an enduring relationship with winemakers, reducing chemical additives and physical treatments, and reducing wineries' environmental impact through better energy use. Moreover, we have developed a natural vineyard solutions range, to mitigate the climate change impact in vineyard. Most of our products are suitable for organic wine production, meeting local regulations.

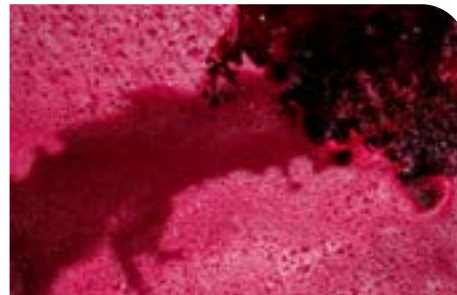
Connected SDGs



Our sustainable solutions for viticulture

An alternative to synthetic products, the **LALVIGNE™** product range can help vineyards recover from damage due to extreme weather events, advance phenolic maturity or increase aroma precursor accumulation.

- **LALVIGNE RESILIENS™** helps improve vineyard resistance to many abiotic stresses, increase yield and accelerate plant recovery following unfavourable weather conditions during the vegetative cycle.
- **LALVIGNE PROHYDRO™**, applied preventively during water stress conditions, improves vine adaptation and resistance to excessive water deficit and accelerate recovery. Through foliar spraying, **LALVIGNE PROHYDRO™** helps vines improve their efficient use of water use and face heat stress.



Paul Zeiss
Area Manager Service & Innovation
Lallemand Oenology • Germany

Lallemand Oenology develops innovative and adapted solutions

Developing solutions to help wine producers adapt to ongoing challenges is key for sustainability. **The research and development team at Lallemand Oenology has done impressive work.** I included many of their solutions in the microbiology section of my book "Quel vin pour demain ? Le vin face aux défis climatiques." When higher pH and lower acidity are an ongoing concern, and there's an increasing desire to produce wine with less or no sulphur dioxide, tools like **IONYSwf™** (*Saccharomyces cerevisiae*), **LEVEL² LAKTIA™** (*Lachancea thermotolerans*), **ML PRIME™** (*Metschnikowia pulcherrima*) and **LEVEL² INITIA™** for bio-protection can help winemakers make sound wines, free of faults.



Michelle Bouffard
WSET Diploma, Sommelier, author,
founder Tasting Climate Change • Canada

A Gold Medal for ML PRIME™ and its sustainable use



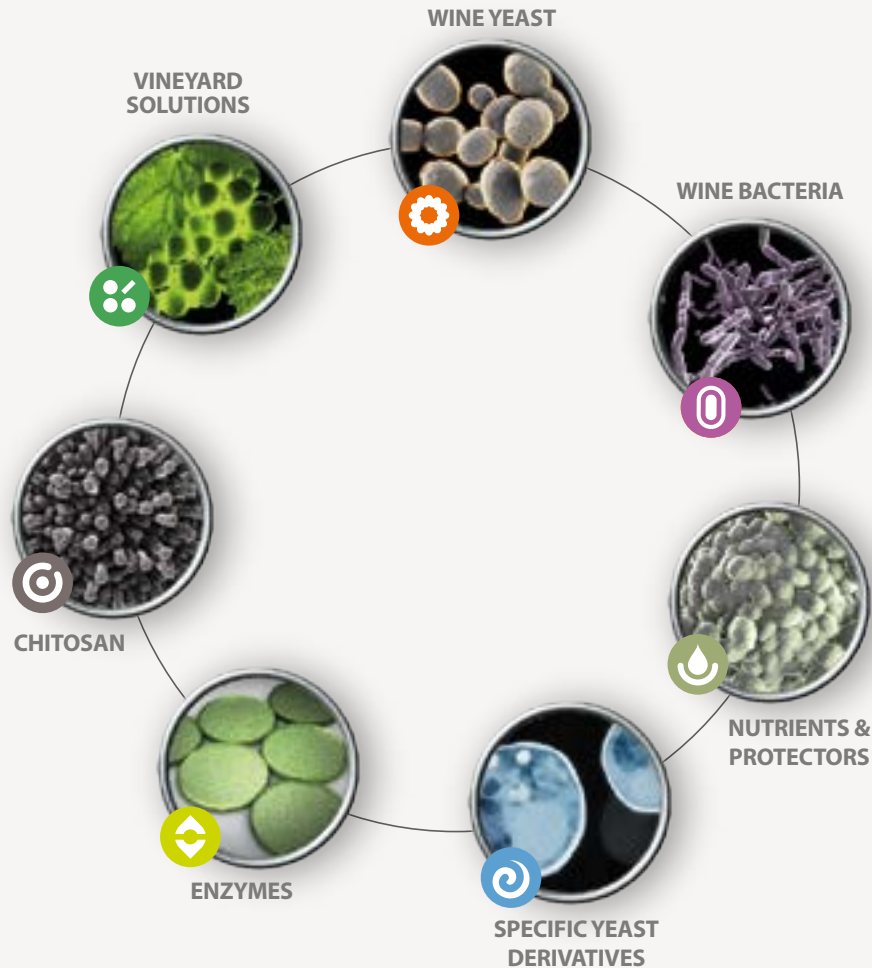
During the German Winegrowers' Association (DWV) Innovation Awards, **ML PRIME™** won the gold medal in the Processing and Process Control category as the most innovative oenological product in 2022. **It achieved the highest scores in all seven criteria, including the level of innovation, influence on wine quality, sustainability and ease of use in practice.**

ML PRIME™ efficiently stabilises wine and requires less labour and time, for a better impact on final wine quality at a similar cost of a classical double salt deacidification treatment.



Impactful Products

Comprehensive natural solutions to reveal and maximise the grapes' full potential throughout the winemaking process, from the vine to the bottle



Our sustainable solutions for winemaking

Our natural microbiological solutions help winemakers adapt to new climate change challenges, mitigate their new environmental and sustainable objectives, and meet continuously evolving consumer expectations.

1• We develop new, efficient natural products and bio-protection solutions as alternatives to adding SO₂

The following three products **reduce the use of SO₂ by 50%**.

- **LEVEL² INITIA™**, bio-protects grapes and musts against oxidation and spoilage microorganisms. White and rosé wines preserve key quality components and freshness.
- **GLUTASTAR™** efficiently and naturally protects musts and wines against browning and aroma oxidation. Aromatic expression and freshness are better, and thiols and esters are preserved longer.
- With **PURE LEES LONGEVITY™**, wines can be stored, aged and transported in bulk or flexitank. They are fresher and retain high levels of aroma compounds. Depending on the final packaging, shelf life can be extended.

2• We select new microorganisms to naturally acidify wines

- During alcoholic fermentation **IONYS_{WF}™** can naturally **increase total wine acidity by up to 1.4 g/L** (ex. tartaric acid).
- With **LEVEL² LAKTIA™**, the average biological lactic acid content increases during alcoholic fermentation, **reaching up to 5g/L in wines**.

3• We promote new solutions and vinification practices that reduce energy or water use in wineries

- **Co-inoculation, a practice introduced more than 20 years ago by our team**, is a game changer for the wine industry. Properly accomplished with **ML PRIME™**, or with our **MBR™** or **1-STEP™** selected wine bacteria, malolactic fermentation quickly launches and finishes using alcoholic fermentation's **natural heat production**. Mechanically heating the wine tank is no longer required. **Co-inoculation saves 100% of energy during this crucial winemaking step**.
- **GO-FERM STEROL FLASH™** rehydrates active dry yeast rapidly and efficiently with **NO need to heat the water**. Yeast fermentative and sensory performances are ensured.
- Filters become less clogged and can be used for longer periods with **LALLZYME MMX™**. Filtration is easier and **requires less water** to clean filter aids.