



QUICK GUIDE TO CHOOSING YEAST NUTRIENTS & DERIVATIVES

| NUTRIENT TYPE | REHYDRATION NUTRIENTS | | FERMENTATION NUTRIENTS | | | | | | |
|------------------------------------|--|--|--|---|--|---|---|--|---|
| PRODUCT NAME | GO-FERM PROTECT EVOLUTION | GO-FERM | FERMAID O | STIMULA CABERNET | STIMULA CHARDON-NAY | STIMULA SAUVIGNON-BLANC | STIMULA SYRAH | FERMAID K | |
| STAGE OF WINEMAKING | During yeast rehydration | | During alcoholic fermentation | | | | | | |
| PRIMARY ACTIVITY | Advanced rehydration nutrient for maximal yeast vitality , sustained fermentative power, and aroma production | Basic rehydration nutrient to enhance fermentation kinetics and avoid fermentation problems | Workhorse yeast nutrient for clean, steady ferments with enhanced aroma production | Stimulates red and black fruit ester production , minimizes greenness, and enhances fermentation performance | Stimulates white/yellow fruit and floral ester production and enhances fermentation performance | Optimizes the expression of tropical and citrus thiols , minimizes sulfur off-odor production , and enhances fermentation performance | Optimizes the expression of dark fruit thiols, floral aromas, minimizes sulfur off-odor production , and enhances fermentation performance | Basic yeast nutrient for improved yeast performance. Used for supplementing very low YAN fermentations. | |
| BEST USED IN | All wines, especially wines with challenging fermentation conditions | All wines, though not recommended for alcohol >14% or stressful fermentation temperatures | All wines | Big reds, Bordeaux-style reds | Fruity and floral whites and rosés | Aromatic whites and rosés, especially if thiol-containing | Medium reds, especially if susceptible to H ₂ S | Wines with very low starting YAN | |
| FORMULATION | Autolyzed yeast rich in sterols , vitamins, and minerals | Autolyzed yeast rich in vitamins, and minerals | Organic nitrogen (amino acids, specific peptides), vitamins, and minerals. The amount and type of each will vary depending on the product, accounting for their different sensory impacts. | | | | | | Blend of organic nitrogen (amino acids) and inorganic nitrogen (DAP), with added vitamins, and minerals |
| MEASURABLE YAN (in ppm) AT 40g/hL | Contains some nitrogen but is not a significant source of YAN and is not a replacement for proper use of fermentation nutrients. | | 16 | 16 | 16 | 16 | 16 | 40 | |
| YAN EQUIVALENTS (in ppm) AT 40g/hL | | | 64-96 | 64-96 | 64-96 | 64-96 | 64-96 | | |
| DMRI LISTED* | YES | YES | YES | NO | NO | NO | NO | NO | |
| PG # | 50 | 50 | 51 | 51 | 52 | 53 | 53 | 54 | |

What Are Rehydration Nutrients?

Rehydration nutrients supply yeast with vitamins and minerals, and some formulations provide survival factors (sterols and unsaturated fatty acids). They also contribute some assimilable nitrogen, but they should not be considered significant sources of YAN. Vitamins and minerals are essential for cell function, whereas survival factors support healthy yeast cell membranes. Survival factors and certain minerals improve the yeasts' tolerance to ethanol, whereas vitamins support growth and aroma production. Rehydration nutrients are added when rehydrating yeast.

What Are Fermentation Nutrients?

Fermentation nutrients supply the yeast with nitrogen (YAN). We recommend adding these nutrients to the juice at inoculation and again partway through fermentation. Supplementing YAN at the beginning of fermentation ensures that a sufficient yeast population to sustain fermentation will develop. Supplementing YAN during fermentation avoids yeast stress which may result in off-odor development and stuck/sluggish fermentations. Our STIMULA line of fermentation nutrients can supply YAN while also stimulating yeast metabolic pathways that promote the production of desirable aroma compounds.



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| YEAST DERIVATIVE NUTRIENTS | | | | | | | |
|--|--|---|--|---|---|--|--|
| GLUTASTAR | RESKUE | NOBLESSE | OPTI-MUM RED | OPTI-RED | OPTI-WHITE | PURE-LEES LONGEVITY | REDULESS |
| Anytime during fermentation (alcoholic or malolactic) | | | | | | | |
| Added pre-fermentation, acts as an antioxidant (protects color and aromas) in aromatic whites and rosés, and can help lower SO₂ use | Removes toxic compounds to reinvigorate sluggish and stuck fermentations (alcoholic and malolactic) | Enhances mouthfeel and over time increases perception of sweetness | Intensifies and stabilizes color , softens mouthfeel, and minimizes greenness | Stabilizes color and softens mouthfeel | Quickly builds mouthfeel in complex whites and rosés , and can act as an antioxidant (protects color and aromas) | Antioxidant (protects color and aromas) | Combats sulfur off-odors and other negative sensory compounds |
| Aromatic white and rosé juice | All wines | All wines | High tannin reds | Medium and light tannin reds | Complex whites and rosés | Aromatic whites and rosés | All wines |
| Fully autolyzed yeast rich in reduced glutathione (GSH) and other powerful antioxidant peptides | Inactivated yeast with high bioadsorptive properties for short and medium chain fatty acids | Partially autolyzed yeast rich in high and low molecular weight polysaccharides | Fully autolyzed yeast rich in high molecular weight polysaccharides and oligosaccharides | Partially autolyzed yeast rich in high molecular weight polysaccharides | Partially autolyzed yeast rich in polysaccharides, contains some reduced glutathione (GSH) | Inactivated yeast rich in oxygen scavenging components | Inactivated yeast with cell walls rich in copper |
| Contains some nitrogen but is not a significant source of YAN and is not a replacement for proper use of fermentation nutrients. | | | | | | | |
| YES | NO | YES | YES | YES | YES | NO | YES |
| 54 | 55 | 55 | 56 | 56 | 56 | 57 | 57 |

What Are Yeast Derivative Nutrients?

Yeast derivative nutrients are made from highly-specialized yeast strains and prepared with specific techniques to enrich the nutrient in beneficial compounds important for winemaking. These compounds include:

- Glutathione and other peptides which have antioxidant effects
- Polysaccharides that can improve mouthfeel by reducing astringency and increasing volume
- Polysaccharides that can stabilize color
- Compounds that can reduce sulfur off-odors

Yeast derivative nutrients should be added either prior to inoculation, during fermentation, or towards the end of fermentation for their ability to protect positive sensory compounds and/or remove negative sensory compounds. While these products contribute some nitrogen to fermentation, they should not be considered significant sources of YAN.

**of note: some products that are not DMRI-listed may still be used in some organic wine programs. Check with applicable organic certifiers.*