

EnartisStab MICRO M 英纳帝斯抑菌剂M

FAQS 常见问题解答

Frequently Asked Questions 常见问题

How does chitosan work? 壳聚糖是如何工作的?

Chitosan is positively charged and acts on the negatively charged cell walls of a wide range of microorganisms, inhibit cell growth and leading to cell death. Furthermore, its affinity to metal cations facilitates removal of prooxidant metals from solution while also destabilizing the structure of cell walls by removing structural cations.

壳聚糖带正电，作用于各种微生物带负电的细胞壁，从而抑制细胞生长，导致细胞死亡。此外，它对金属阳离子的亲和力有助于从溶液中去除促氧化金属，同时也可以通过去除结构阳离子来破坏细胞壁的结构。

Why are Enartis' chitosan-based products more effective than the competitors? 为什么英纳帝斯的壳聚糖产品比竞争对手同类产品更有效?

It's pre-activated. Enartis has developed a unique pre-activation process that aims to increase the positive molecular charge and enlarge the contact surface area of chitosan. It improves reactivity with a wider spectrum of spoilage microorganisms (such as *Brettanomyces*, *Oenococcus*, *Pediococcus*, *Acetobacter*, *Lactobacillus*, *Zygosaccharomyces*, *Schizosaccharomyces*, and other contaminants yeast) and increases solubility, making it a more rapid and effective product.

因为它是预先激活的。英纳帝斯开发了一种独特的预活化工艺，旨在增加壳聚糖的正分子电荷数量并扩大其接触表面积，从而提高了它与更广泛的腐败微生物（如酒香酵母属、乳球菌属、片球菌属、醋杆菌属、乳酸杆菌属、接合酵母属、裂殖酵母属和其他不良酵母等）的反应性，并增加了产品的溶解度，使其成为更快速有效的产品。

What does EnartisStab MICRO M contain? 英纳帝斯抑菌剂 M 中含有什么成分?

EnartisStab MICRO M contains pre-activated chitosan derived from *Aspergillus niger* and inactivated yeast, specifically developed for the treatment of musts and wines, even in high turbidity.

英纳帝斯抑菌剂 M 含有来自黑曲霉和灭活酵母的预活化壳聚糖，专门用于处理葡萄醪和葡萄酒，即使在高浊度环境中也适用。

How soon do I need to rack-off after treatment with this product? 使用该产品处理后，多久需要进行倒罐分离?

Depending on the microbial contamination load, we recommend 10 days of contact in which the product can be resuspended every other day. Once the product is removed via racking, the wine is no longer protected. For improved efficacy when treating a wine, an initial contact time of 30 min via mixing is important. After initial treatment, EnartisStab MICRO M can remain in the wine for prolonged periods (up to 4 months) and periodic stirring/resuspension (every 1 – 2 weeks) will help prevent spoilage during ageing.

根据微生物的污染程度而定，一般来说我们建议产品接触时间在 10 天左右，并每隔一天搅拌一次使产品重新悬浮。一旦通过倒罐将酒液与产品分离，葡萄酒就不再受到产品的保护。为了提高产品功效，初次添加时通过搅拌以确保 30 分钟的

接触时间是非常重要的。经过初步处理后，英纳帝斯抑菌剂 M 将可以在葡萄酒中长时间保留（最多 4 个月），配合定期搅拌/再悬浮（每 1-2 周一次）将有助于防止葡萄酒在陈酿过程中产生变质。

Can EnartisStab MICRO M replace SO₂? 英纳帝斯抑菌剂 M 可以替代 SO₂ 吗?

The treatment with EnartisStab MICRO M can help replace or reduce the use of SO₂. It has antimicrobial, antioxidant, and antioxidasic activity, and unlike SO₂, its efficacy is not pH-dependent. Using EnartisStab MICRO M is a very effective way of preventing microbial contamination and oxidation, while keeping SO₂ levels low. While EnartisStab MICRO M is approved for eliminating spoilage microorganisms, wines will also benefit from this treatment by removing oxidative precursors (catechins), inhibiting oxidative enzymatic activity (laccase from rotten grapes), and chelating metals (copper and iron) responsible for oxidation reactions.

使用英纳帝斯抑菌剂 M 进行处理可以帮助取代或减少 SO₂ 的使用。它具有抗菌、抗氧化和抗氧化酶活性，与 SO₂ 不同的是，它的功效不依赖于环境的 pH 值。

使用英纳帝斯抑菌剂 M 是防止微生物污染和氧化，同时保持低 SO₂ 水平的一种非常有效的方法。虽然英纳帝斯抑菌剂 M 被批准的用途是用于消除腐败微生物，但葡萄酒同时也将受益于产品去除氧化前体（儿茶素）、抑制氧化酶活性（如腐烂葡萄中的漆酶）和螯合催化氧化反应的金属（铜和铁）等活性。

How many ppm SO₂ protection does EnartisStab MICRO M provide at a given dose rate? 在推荐的用量下，英纳帝斯抑菌剂 M 能提供相当于多少 ppm 的 SO₂ 的保护作用?

EnartisStab Micro M does not have any direct SO₂ protection equivalent. It acts by removing microbes, small phenolic compounds, and metals, thereby allowing for lower SO₂ dosages.

英纳帝斯抑菌剂 M 的保护效力无法与 SO₂ 的保护效力进行直接的等效计算。它的作用是去除微生物、小分子量酚类化合物和金属离子，从而降低 SO₂ 的用量。

How to maintain microbiological control after treatment with EnartisStab MICRO M? 在使用英纳帝斯抑菌剂 M 处理之后，如何保持对微生物的控制效果?

To ensure microbial stability, it is recommended to use EnartisStab Micro M in synergy with HIDEKI, a blend of technical tannins with bacteriostatic action. Essentially, EnartisStab Micro M removes microbes on contact, while HIDEKI can be added afterwards to suppress future microbial growth.

Both these products can also be effectively used to inhibit malolactic fermentation.

为了确保微生物的稳定性，建议将英纳帝斯抑菌剂与千机协同使用，千机是一种具有抑菌作用的技术单宁。从本质上讲，英纳帝斯抑菌剂 M 可以去除与其接触的微生物，而 HIDEKI 可以在接触后添加以抑制未来的微生物的生长。

这两种产品也可以有效地用于抑制苹果酸乳酸发酵。

Can I use EnartisStab MICRO M instead of lysozyme to delay or prevent MLF and stabilize my wine? 可以用英纳帝斯抑菌剂 M 代替溶菌酶来延缓或预防 MLF 并稳定葡萄酒吗?

Absolutely! Lysozyme is considered an allergenic product, while EnartisStab MICRO M is allergen-free. Additionally, lysozyme is only effective against lactic acid bacteria, while EnartisStab MICRO M can control *Brettanomyces*, wild yeast, *Acetobacter*, *Zygosaccharomyces*, and *Lactobacillus*. At 10 g/hL it is highly effective at preventing MLF and once settled and removed, MLF can proceed as normal using the [EnartisML](#) range.

当然可以！溶菌酶被认为是一种致敏产品，而英纳帝斯抑菌剂 M 不含过敏原。此外，溶菌酶仅对乳酸菌有效，而英纳帝斯抑菌剂 M 可以控制酒香酵母属、野生酵母、醋杆菌属、接合酵母属和乳酸杆菌属等多种微生物。在用量为 10 克/百升时，它在预防 MLF 方面非常有效，并且一旦将它进行沉淀和去除，仍然可以通过接种英纳帝斯乳酸菌进行正常的苹果酸发酵。

The TDS states that EnartisStab MICRO M can help prevent the formation of reductive compounds, but which ones do this product help to minimize? 产品资料中指出，英纳帝斯抑菌剂 M 可以帮助防止还原性化合物的形成，但该产品具体有助于减少哪些化合物？

EnartisStab MICRO M can prevent the formation of sulfur compounds when used during fermentation by limiting microbe/yeast interactions. EnartisStab MICRO M has been shown to significantly reduce methyl mercaptan (rotten cabbage, stagnant water), ethyl mercaptan (burnt match, earthy), diethyl sulfide (rubber), dimethyl sulfide (canned corn, asparagus), and other associated sulfur compounds, although its effect on elevated levels of hydrogen sulfide is negligible.

英纳帝斯抑菌剂 M 可以通过限制发酵过程中微生物和酵母的相互作用，从而防止含硫化合物的形成。英纳帝斯抑菌剂 M 已被证明可以显著减少甲硫醇（腐烂的卷心菜、死水）、乙硫醇（烧焦的火柴、泥土）、二乙基硫醚（橡胶）、二甲基硫醚（玉米罐头、芦笋）和其他相关的硫化物，尽管其对硫化氢水平升高的影响可以忽略不计。

What about other volatile phenols such as those associated with *Brettanomyces*? 英纳帝斯抑菌剂 M 对其他挥发性酚类物质，如与酒香酵母有关的酚类物质的影响呢？

Significant reductions, up to around 50%, have been demonstrated on the most found volatile phenols, 4-ethylguaiacol (4-EG) and 4-ethylphenol (4-EP), as well as significant reductions in both 4-vinylguaiacol (4-VG) and 4-vinylphenol (4-VP). To eliminate and reduce odors related to the formation of volatile phenols, we recommend using it in synergy with FENOL FREE.

英纳帝斯抑菌剂 M 已被证明可以显著减少最常见的挥发性酚类的含量高达 50%，如 4-乙基愈创木酚（4-EG）和 4-乙基苯酚（4-EP），以及 4-乙烯基愈创木苯酚（4-VG）和 4-乙烯基苯酚（4-VP）。为了消除和减少与挥发性酚类形成有关的气味，我们建议将其与芬诺弗雷协同使用。

What kind of dose rates should I be using depending on the type of spoilage microorganism? 怎么根据不同的微生物种类决定英纳帝斯抑菌剂 M 的使用剂量？

The table below provides an idea of the amount of EnartisStab MICRO M we would suggest using for major spoilage microorganisms.

下表提供了我们建议的用于抑制主要类型的腐败微生物的英纳帝斯抑菌剂 M 的用量。

CONTAMINATION	LOW	AVERAGE	HIGH
NUMBER OF CONTAMINATING CELLS/mL	<100	10 ² - 10 ⁴	10 ⁴ - 10 ⁶
<i>Brettanomyces</i>			
<i>Lactobacillus</i>			
<i>Oenococcus</i>			
non-Saccharomyces			
Zygosaccharomyces			
<i>Pediococcus</i>			
<i>Acetobacter</i>			
Suggested dose of EnartisStab Micro M (g/hL)	5	10	20

Can I use EnartisStab MICRO M in wine maturing in barrel to prevent microbial growth? 我可以在木桶中熟化的葡萄酒中使用英纳帝斯抑菌剂 M 来防止微生物生长吗?

Yes, EnartisStab MICRO M is approved for use in juice, must, and wine in barrel or any type of vessel. EnartisStab MICRO M remains effective in wine for prolonged periods (up to 4 months), and periodic stirring/resuspension (every 1 – 2 weeks) will help prevent spoilage during ageing.

是的，英纳帝斯抑菌剂 M 在葡萄酒中可保持长期有效（长达 4 个月），通过定期搅拌/再悬浮（每 1-2 周一次）有助于防止葡萄酒在陈酿过程中发生变质。

Can EnartisStab MICRO M be used for sluggish/stuck fermentations? 英纳帝斯抑菌剂 M 可以用于发酵迟缓/中止吗?

Absolutely. You can avoid a time-consuming restart or make it more successful by [using EnartisStab MICRO M to eliminate competition](#) for the inoculated yeast. It kills all bacteria and *Brettanomyces* while not affecting *S. cerevisiae*, so you can rest easy knowing that the sugar and nutrients are only consumed by friendly microbes. 当然可以。您可以通过使用英纳帝斯抑菌剂 M 来消除接种酵母的竞争，从而避免更耗时的重新启动过程或使其更加成功。它会杀死所有细菌和酒香酵母，同时不影响酿酒酵母的生长，所以您可以放心，因为知道糖和营养素只会被友好的微生物消耗。

Can EnartisStab MICRO M be used for wild/spontaneous fermentations? 英纳帝斯抑菌剂 M 可以用于野生/自发发酵吗?

Yes. EnartisStab MICRO M can be added to must that will go through spontaneous fermentation. This helps ensure complete fermentation kinetics and decrease the risk of contaminants. EnartisStab MICRO M promotes cleaner, defect-free fermentations, working as a useful tool even in those conducted by indigenous yeasts. 是的，英纳帝斯抑菌剂 M 可以添加到将经历自发发酵的葡萄醪中。这有助于确保完整的发酵动力学并降低被污染的风险。英纳帝斯抑菌剂 M 能够促进更清洁、无缺陷的发酵过程，即使在由本土酵母进行的发酵中也是一种有用的工具。

Does EnartisStab MICRO M reduce the impact of TCA (cork taint)? 英纳帝斯抑菌剂 M 是否能减少 TCA（软木塞污染）的影响?

It can certainly help! Our advised is to use it together with [PLANTIS AF](#), a powerful tool to reduce TCA concentration. In fact, a trial done with EnartisStab MICRO M on white wine exhibiting a moldy TCA note at 39 ng/L of 2,4,6 trichloroanisole showed a reduction of more than 50% and was determined to be clean by a panel of tasters following a 17 g/hL addition of EnartisStab MICRO M.

它肯定会有所帮助！我们建议将其与普朗提斯 AF 一起使用，这是一种降低 TCA 浓度的强大工具。事实上，用英纳帝斯抑菌剂 M 对一款表现出发霉 TCA 气味，并含有 39ng/L 的 2, 4, 6-三氯苯甲醚的白葡萄酒进行的一项试验显示，TCA 的气味减少了 50% 以上，并且在添加量增加为 17 克/百升后，这款葡萄酒被品尝小组确认为是干净的。

If you have any further questions, please contact Technical Support vino@enartis.it

如果您还有任何问题，请联系技术支持 enartis.china@enartis.com