



Inspiring innovation.

SO₂ FREE WINES: UTOPIA OR REALITY?

BARBARA SCOTTI

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Comparison of
Tannin low dosage addition
VS
Enartis complete protocol
in the production of SO₂ free wines

WINEMAKING STAGE	CONTROL NO SO ₂	CONTROL + SO ₂	LD - HIDEKI	ENARTIS - P
In the press		50 mg/L SO ₂	1 g/100 kg Hideki	
Beginning of settling				5 g/hL Stab Micro M
	2 mL/hL EnartisZym RS			
			3 g/hL Hideki	10 g/hL Tan CIT
	2 hours after enzyme addition, add 10 g/hL of Pharmabent			
Yeast inoculation				3 g/hL Stab Micro M
				5 g/hL Tan CIT
	20 g/hL EnartisFerm Vintage White			
	30 g/hL Nutriferm Energy			
1/3 sugar depl.	20 g/hL Nutriferm Advance			
End of AF	Rack off			
		25 mg/L of SO ₂	3 g/hL Hideki	3 g/hL Hideki
				10 g/hL Stab Micro M
After second Rack off	Addition of 10 g/hL EnartisPro Blanco			
		30 mg/L of SO ₂		1 g/hL Hideki 5 g/hL Stab Micro M
Maturation	Storage at 14°C. Stirring every 7/10 Days			
		25 mg/L of SO ₂		
Bottling SET 1	NO ADDITION			
Bottling SET 2	+ 50 mg/L SO ₂	No addition	+ 50 mg/L SO ₂	+ 50 mg/L SO ₂

CHEMICAL PARAMETERS


	CONTROL NO SO ₂	CONTROL SO ₂	LD- HIDEKI	ENARTIS - P
Previous additions		50 mg/L SO ₂	4 g/hL Hideki	8 g/hL Stab Micro M 15 g/hL Tan CIT
At the end of AF		25 mg/L of SO ₂	3 g/hL Hideki	3 g/hL Hideki 10g/hL StabMicro M

pH	3,48	3,48	3,5	3,51
Total acidity (g/L)	5,85	6,00	5,78	5,85
Volatile acidity (g/L)	0,29	0,39	0,28	0,30
Malic acid (g/L)	1,22	1,20	1,05	1,13
Lactic acid (g/L)	0,27	0,27	0,27	0,27
Alcohol	13,58	13,53	13,94	13,44
Glycerol (g/L)	7,5	6,51	7,85	7,52
Free SO₂ (mg/L)	4	10	4	4
Total SO₂ (mg/L)	8	50	10	10
Acetaldehyde (mg/L)	12,8	22,6	13,4	12

BLIND TASTING - 6 PEOPLE

	CONTROL NO SO ₂	CONTROL SO ₂	LD- HIDEKI	ENARTIS - P
COMMENTS	<p>Fruity, clean aroma.</p> <p>At the palate balanced, fresh and light</p>	<p>Reduced on the nose, citrus aroma.</p> <p>Dry and bitter at the palate</p>	<p>Very fruity, clean, fresh and citrus at the nose.</p> <p>Nice structure. Very persistent</p>	<p>Initially less intense than Hideki. Then note of citrus, pineapple, sweet fruits.</p> <p>The best at the palate: sweet perception, full body, more fruity at the palate than at the nose.</p>
PREFERENCE	2	THE WORST	1 for the aroma	1 for the palate

- SO₂ has an impact on wine taste! DRYNESS + BITTERNESS
- All wines without SO₂ were preferred

**MALOLACTIC FERMENTATION
POST-BOTTLING**

1 SET NO SO₂ ADDITION AT BOTTLING	CTRL NO SO₂	CTRL SO₂	LD - HIDEKI	ENARTIS - P
2 SET + 50 mg/L SO₂ AT BOTTLING	CTRL NO SO₂ + SO₂	//	LD - HIDEKI + SO₂	ENARTIS - P + SO₂



No SO₂



SO₂



HIDEKI



Enartis P





SO₂



HIDEKI



Enartis P



HIDEKI
+ SO₂

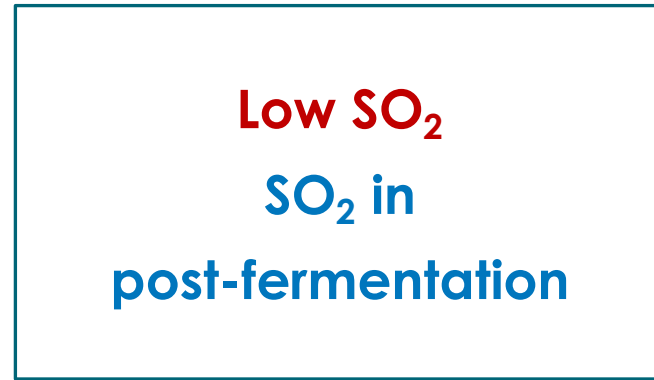
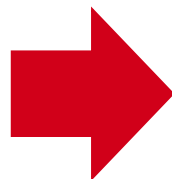
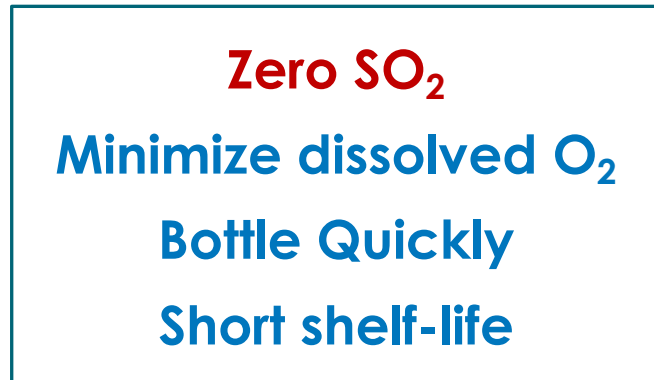


Enartis P
+ SO₂

SO₂ FREE WINE PRODUCTION

HEALTHY GRAPES

TANNINS + CHITOSAN IN THE PRE-FERMENTATION STAG





THANK YOU

enartis