



STANDARDS FOR DEMETER/ BIODYNAMIC[®] WINE

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to be implemented by each member country by the 30th June 2009

Demeter International e.V.

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Validity and basis

These guidelines are divided into three sections:

1. Background and objectives.
2. Scope and guiding principles
3. Wine processing standards

These Guidelines are intended to give transparency to interested readers about the ingredients and the processes used for making Demeter or Biodynamic labelled wines. The objectives and principles govern the standards.

Ideally Demeter/Biodynamic wine helps the development of nature and man, speaking to the senses and speaking to the mind. Demeter/Biodynamic wine growing is not a means to an end. Its purpose is to enrich the world and to celebrate the beauty of landscape and life.

1. Background and objectives

The aims and objectives are derived from the lectures given in the year 1924 by Rudolf Steiner and which are published and known as "The Agricultural Course". These lectures refer among other subjects to the cosmos (the heavens) as creating life forces in man, animals and plants and refer to the ways to make these life forces productive in agriculture and horticulture, including growing grapes. It needs the human being in the role of an artist to develop soil, fertility and plant in such a way that fruits of vital quality become available.

Demeter/Biodynamic wine is made from Biodynamically raised grapes. These grapes are the product of an extended Goethean view of nature that sees nature as an integrated body in which material, form, warmth and rhythm all play a part. Out of this concept, the Biodynamic method with its preparations, working in cooperation with the rhythms of the cosmos, specialized plant breeding etc. has grown. The aim is to move the vineyard more and more towards an individuality in its own right using these methods. The grapes produced by such a vineyard should be a true, unique, authentic expression of this individuality

As the growth and ripening of fruit is dependant on the respectful combination of cosmic and material forces, the development of man is also dependant on a respectful interaction with nature and on appreciative communion between individuals. It is a sign of Biodynamic quality development to foster these interactions. The character of individual Demeter/Biodynamic wines will vary according to who and what has contributed to its emergence.

In making reference to artistically determined processes it is obvious that the application of the rules and conditions described in these guidelines cannot by themselves ensure the inclusion of life forces in produce. Section three of these standards in particular ensures that the rules and conditions described will avoid degradation of life forces as much as is presently possible.

Research in Biodynamic production and in wine processing continues on a permanent basis. Therefore these standards will be subject to continuous improvement. Practitioners in fact are required to research in the areas of soil, plant and social development. They are required likewise to continually research ways to improve the processing of wine. In section three, the column listing aims indicates potential improvements to the processing method. These are to used as a guideline defining directions for development.

Biodynamic/Demeter wine is offered to a discerning public. Customers are offered maximum transparency about the origin and the handling of Demeter/Biodynamic wine including the use of additives or agents, even if they will only be temporarily in contact with the final product. Nothing shall conceal the true nature or the factual properties of the produce.

The quality of Demeter/Biodynamic wine expresses itself as preserved vitality. This can be measured conventionally through the presence or absence of ingredients, and through other assessment techniques such as crystallisation and the study of formative forces

2. Scope and guiding principles

The grapes and the producing farm must be certified. Certification must be through a certifier which itself is authorised by a Demeter Organisation. This Demeter Organisation itself needs to be recognised by the international community of Demeter producers and processors, in other words be a member of Demeter International, an association incorporated in Darmstadt, Germany.

The work carried out in the wine cellar is a rounding off of the processes underlying grape production in the vineyard. As little technology is employed as possible and the fewest aids and additives used in all stages of the process. Aids and additives currently permitted should be reduced or phased out as processing techniques improve. The procedures should respect and be in harmony with the surroundings, the location, and the people involved in production. The primary aim is to at least maintain the quality present in the Biodynamic fruit. (For that reason harvesting the grapes by hand is preferred in order to guarantee the highest possible raw material quality for processing.)

All processing steps and methodologies used to process both the grapes as well as the ensuing products are to follow the following principles:

- The product shall be of high quality in sensory terms and digestibility, and taste well.
- Sulphur dioxide is to be used to the minimum.
- Processes that require large inputs of energy or raw materials are to be avoided.
- Aids and additives that raise environmental or health questions, from the point of view either of their origin, their use or their disposal, are to be avoided.
- Physical methods are preferable to chemical methods.
- All processing by-products, be they organic residues or wastewater, are to be dealt with so that negative effects on the environment are minimised.

The standards are defined in terms of a positive list of processes, ingredients, additives and aids. All other methods and materials not mentioned in this standard are excluded from the production of Demeter wine. Nevertheless, in order to emphasise the strict prohibition of some common processes and materials, the following are not permitted:

- The use of genetically modified micro – organisms
- Potassium hexacyanoferrate
- Ascorbic acid, sorbic acid
- PVPP (Polyvinylpolypyrrolidone)
- Diammonium phosphate
- Isinglass (Sturgeon swim bladder), blood and gelatine

All materials that are used for processing equipment, including tanks for fermentation and storage must in no way compromise the quality of, or pose contamination risks to the juice or wine.

3. Wine processing standards.

		Aim	Standard
3.1	Origin of fruit		
		100% Demeter certified fruit.	100% Demeter certified fruit.
3.2	Harvest		
		Hand harvesting	Machine harvesting permitted. Pomace to be returned to the vineyard.
3.3	Cellar machinery		
		Maximum use of gravity	Pumps that develop high shear or centrifugal forces e.g. centrifugal pumps are not permitted in new installations or when replacing machinery
3.4	Tanks		
		Natural materials	Concrete, Wooden barrels, Porcelain, Steel tanks, Stoneware, Clay amphora, all permitted
	Plastic		Plastic vessels restricted to transfer. Not for storage
3.5	Physical measures with the product		
			Heating of the red wine mash to a maximum of 35°C allowed. Use of heating and cooling to steer fermentation is permitted. No pasteurisation
3.6	Enrichment with sugar (chaptalisation)		
	Addition of sugar	No sugar addition	Addition of sugar to increase the alcohol content by a maximum of 1.5% by

			volume is permitted. Demeter sugar or grape juice concentrate, if unavailable certified organic sugar.
	Alteration of the juice, liquid in the mash (concentration)		Concentration of the entire must is not allowed. Alcohol reduction by technical methods is prohibited. Addition of water to the mash/must is permitted
3.7	Alcoholic fermentation		
	Fermentation technique		Heating to speed up fermentation permitted, no pasteurisation
	Yeast	Indigenous yeast only	Indigenous yeast, pied de cuve (Demeter or organic), Demeter or organic yeast, GMO free commercial yeast
	Yeast nutrients	Demeter yeast hulls	Demeter/organic yeast hulls: other yeast nutrients need approval by the respective organisation
3.8	Biological acid reduction		
		Indigenous Malolactic Bacteria only	Lactic acid bacteria, free of GMO
3.9	Preservation with sulphur		
	SO ₂ total [mg/l] at bottling	SO ₂ to be restricted to the absolute minimum	<5g/l residual sugar, white 140 red 110 >5g/l residual sugar, white 180 red 140 Sweet wines: 360 with Botrytis, 250 without. Sparkling wines the same as white.
3.10	Tartar stabilisation		
		Only cold stabilisation, natural tartrate from BD wine production	Cold treatment, natural tartrate from BD or organic wine production
3.11	Fining agents		
	Organic	No organic fining agents derived	Egg white from Demeter/organic eggs, Demeter milk and milk products, if

		from animals	unavailable organic, Casein.
	Non-organic	Bentonite	Bentonite (non-detectible levels of dioxin and arsenic), activated charcoal, Copper sulphate (0.5ppm max), aeration, oxygen including Micro Ox
3.12	Filtration		
	Organic	Allowable materials Not defined	Cellulose, textile (unbleached/chlorine free)
	Non-organic	Bentonite Diatomaceous earth	Diatomaceous earth, bentonite (Non-detectable levels of dioxin and arsenic), perlite
3.13	Acidity regulation		
		No acidity regulation	Potassium bicarbonate KHCO_3 , CaCO_3 , Tartaric acid (E334) permitted
3.14	Bottling aids		
			CO_2 , N_2
3.15	Bottling		
			Glass
3.15.1	Closures		
			Glass, cork, screw top, crown corks.
3.15.2	Tamperproof seal		
			Nirosta, plastic or tin capsules, poly cap, sealing lacquer or wax.
3.15.3	Declaration		
			Country of origin labelling required
3.16	Cleaning and disinfection		
	Premises and equipment		Water, steam, sulphur, soft soap, caustic soda, ozone, peracetic acid, citric acid followed by flushing with potable water.

4. Labelling of Demeter and Biodynamic® wine.

4.1 Use of the Demeter co-brand

If wine is made from Demeter/Biodynamic® grapes, **and** conforms to the Demeter International wine standards, it may be labelled with the Demeter co-brand. The general requirements are detailed in LABELLING STANDARDS OF DEMETER PRODUCTS WITH THE NEW DEMETER TRADEMARK LOGO as of June 2000 revised June 2004. The logo may be used on the front label conforming to the standardized placement requirements in section 3. It may be used on the back label, following the same placement rules.

4.2 Use of the word Biodynamic®

If wine is made from Demeter/Biodynamic® grapes, **and** conforms to the Demeter International wine standards, the word Biodynamic® may be used. Usage shall conform to the labelling standards for Biodynamic®. It may be used in the text on the front or back label. It shall not be used as a prominent logo.

4.3 Use of the flower logo

If wine is made from Demeter/Biodynamic® grapes, **and** conforms to the Demeter International wine standards, the flower countries have the option to use the flower logo on the back label, complying with the national standards for labelling.

4.4 Labelling restriction

If the Demeter International wine standards are not met, there shall be no reference to Biodynamic® or Demeter anywhere on any label.

Note: The wine standards are to be incorporated in the Demeter International processing standards, the labelling section in the Demeter International labelling standards.