

EXECUTIVE SUMMARY

By using the DNV Carbon Tracking Model © for the “Grape must and bottled still and sparkling wines” (Doc. DNV_CTM_01_Rev.0) product, DNV GL Business Assurance Italia S.r.l. quantified the greenhouse gas emissions (GHG) relative to 0.75 liter of wine, produced and bottled by the Organization

TENUTA DI DONNAFUGATA S.R.L. SOCIETA' AGRICOLA
Via S. Lipari, 18 - 91025 MARSALA (TP) - ITALIA

with grapes sourced from the vineyards of Pantelleria (Trapani), of Contessa Entellina (Palermo), of Marsala (Trapani) and purchased and marketed with the brands listed here below. The resulting GHG emissions were as follows:

White Wines	0.75 liter bottle of brands	CO2-eq (g)
	Damarino	1.252
	Anthilia	1.281
	La Fuga	1.252
	Vigna di Gabri	1.252
	Chiarandà	1.245
	Prio	1.252
	Sur Sur	1.303

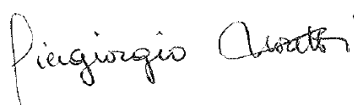
Red Wines and Rosés	0.75 liter bottle of brands	CO2-eq (g)
	Sherazade	1.295
	Sedara	1.303
	Angheli	1.255
	Tancredi	1.226
	Mille e una notte	1.222
	Lumera	1.255

White and Natural Sweet Wines of Pantelleria	0.75 liter bottle of brands	CO2-eq (g)
	Lighea	1.476
	Kabir	1.710
	Ben Ryé	1.752

The methods used to quantify the GHG emissions are described in document DNV_CTM_01_Rev.0 on the calculation of the Carbon Footprint of wine/wine musts made with the following specifications:

- wine in 0.75 liter glass bottles;
- quantification did not concern pre-bottling processes or distribution, use and end of life of the finished product;
- the activity data used in the calculation were supplied by TENUTA DI DONNAFUGATA S.r.l. Società Agricola and refer to the 2017 harvest;
- the emission factors were obtained from the Ecoinvent v.3.1 database and from the following business sector analyses:
 - ANPA RTI AMB-EMISS 3/2001 report for emission factors of farming machines/equipment;
 - Carbon Footprint Enologica Vason – 2009, for the following substances: Yeasts, Bentonite, Enzymes, Proteins;
 - 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4 "Agriculture, Forestry and Other Land Use", for fertilizers;
 - Conversion Factor 2018 UK Government GHG Conversion Factor for Company Reporting, for fertilizers and crop protection products
 - Transport, Conversion Factor 2018 UK Government GHG Conversion Factor for Company Reporting
 - EdF for electrical consumption from AIB European Residual Mixes (2017) including production, transport and processing
- emissions/removal of carbon of the soil due to farming activities (such as fertilizing the soil with vineyard pruning, row cultivations, etc.) were not quantified and no distinction was made between biogenic and non-biogenic carbon.

Per Det Norske Veritas Italia
S.r.l.



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