

# **TSINANDALI**

NUMBER OF REGISTRATION: 3

DATE OF REGISTRATION: 30/08/2005

APPELLATION OF ORIGIN: TSINANDALI

GOOD FOR WHICH REGISTRATION IS REQUIRED: Wine

NAME AND ADDRESS OF APPLICANT: LEPL - National Wine Agency; Marshal Gelovani Av. 6, 0159, Georgia, Tbilisi

**1. NAME: "TSINANDALI"**

**2. ADDITIONAL SIGNS:**

**3. TYPE, COLOR AND MAIN REQUIREMENTS:**

"Tsinandali" is white sec (dry) wine, which shall satisfy the following requirements:

- Color – light straw;
- Aroma and taste – perfect, delicate, soft, harmonic, cheerful, refined, having aroma characterizing the location, with meadow flowers tones, fruit tones are developed with aging;
- Volumetric spirit content – no less than 11 %;
- Concentration of finished extract mass – no less than 16 g/l;
- Sugar content – no more than 4 g/l;
- Titrated/ Volatile acidity – no less than 5 g/l;
- Other characteristics shall meet requirements provided by the legislation of Georgia.

#### **4. SPECIFIC ZONE AVAILABLE AREAS**

The micro-zone Tsinandali is located in Telavi Municipality, on the right bank of the River Alazani, and on the coordinates – 41°54' of Northern longitude and 45°35' of Eastern latitude. The micro-zone Tsinandali covers the forests continuing North-Eastern slopes of Tsiv-Gombori Range from one side, and areas nearby mountains and Alazani Gorge from another side. Chumatkhevi borders it from the North-West, and Akuriskhevi – from the South-West.

Tsinandali includes the villages: Akura, Vanta, Busheti, Kvemo Khodasheni, Tsinandali Kisiskhevi, Kondoli, Nasamkhrali, Shalauri, Kurdghelauri, Vardisubani, Ruispiri, Karajala, Gulgula and Ikalto.

#### **5. VINE VARIETIES**

Wine "Tsinandali" shall be prepared from the grapes of Rkatsiteli, vintage takes place in the micro-zone Tsinandali. It is permitted to use about 15% of Kakhuri Mtsvane, vintage takes place in the same micro-zone.

#### **6. VINEYARD CULTIVATION, SHAPE OF PRUNING AND CARE:**

- The micro-zone Tsinandali vineyards for wine Tsinandali shall be situated on 300-750 m above sea level.
- Distance between the rows in the vineyards – 1-3 m;
- Distance between the vines in the row – 0.8-1.5 m;
- Height of stem – 60-90 cm;
- Shape of pruning – one-sided or Georgian two-sided or free;

Vine cultivation, shape and pruning, pests and diseases control, and soil treatment, fertilization, and other operations, shall be provided according to agro-technical activities selected by wine-makers.

#### **7. GRAPE MATURITY, VINTAGE, TRANSPORTATION:**

- Tsinandali shall be produced only with ripe grapes;
- Sugar content shall be no less than 19%, at the vintage;
- Grapes transportation is permitted only with wooden or plastic boxes, with bodyworks made of stainless steel or painted with special color;
- Usage of polyethylene packages and/or bags is not allowed;
- The grapes shall be protected from dirtying at the transportation.

## **8. VINTAGE AND WINE PRODUCTION**

Vintage on 1 ha vineyard shall be:

- 10 tons for Rkatsiteli;
- 8 tons for Kakhuri Mtsvane.

Wine production shall be no more than:

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- 6500 liters – from 1 ha vineyard for Rkatsiteli;
- 5200 liters – from 1 ha vineyard for Kakhuri Mtsvane.

## **9. GRAPE PROCESSING, WINEMAKING AND BOTTLING**

Grapes Rkatsiteli and Kakhuri Mtsvane (15%) for producing wine "Tsinandali" shall be only from the vineyards of the micro-zone Tsinandali.

Grapes processing and winemaking shall be provided exclusively inside of Kakheti, bottling – outside Kakheti, but only on the territory of Georgia.

At the same time, the grapes shall be got from the micro-zone Tsinandali and the wine shall be withdrawn from viticulture zone Kakheti only under strict accounting and control.

"Tsinandali" is made by complete alcoholic fermentation of gravity grape juice.

In the production of wine "Tsinandali" it is permissible to use only the operations, materials and substances permitted by the legislation of Georgia.

"Tsinandali" shall be represented on consumer market only packed in the consumer vessels.

## **10. LINK BETWEEN EXCLUSIVE QUALITY, REPUTATION AND GEOGRAPHICAL AREA**

**CLIMATE** – The climate in the micro-zone is moderately humid, with hot summer and mild winter. Annual duration of sunlight in the micro-zone Tsinandali more than 2300 hours. Direct annual radiation on the perpendicular surface is  $76 \text{ kcal/cm}^2$ , and varies within  $-92-60 \text{ kcal/cm}^2$ . Scattered annual radiation is  $54 \text{ kcal/cm}^2$ , and  $-40 \text{ kcal/cm}^2$  in the vegetation period. Sum of annual radiation is  $130 \text{ kcal/cm}^2$ , and  $100 \text{ kcal/cm}^2$  – in the warm period.

The average annual air temperature of the micro-zone is quite high  $+12.4^\circ\text{C}$ , in the warmest months – July and August the average temperature is equal to  $+23.2^\circ\text{C}$ , and that of the coldest month (January) is  $+0.90^\circ\text{C}$ . Annual absolute minimum is averagely  $-10^\circ\text{C}$ , and maximum  $+35^\circ\text{C}$ .

Extreme temperatures are change within  $-23^\circ\text{C} - +38^\circ\text{C}$ . In most parts of the region the temperature above  $10^\circ\text{C}$  is in the April I decade (from 8.IV), and below  $10^\circ\text{C}$  – in the beginning of November (3.XI).

Vegetation period duration is 208 days, and sum of active temperatures ( $ct > 10^\circ\text{C}$ ) is  $+3930^\circ\text{C}$ , on 550 m level.

In the micro-zone Tsinandali annual number of sunny days (0-2 points) in general, and at lower clouds is equal to 52-82, accordingly. During the vegetation period, this indicator is equal to 36-55 days according to cloudiness. Annual quantity of cloudy days (8-10 points) in general and at lower clouds is equal to 122 and 95, accordingly. During the vegetation period, this indicator is equal to 61-45.

The annual sum of atmospheric precipitations is 845 mm, and 644 mm during the vegetation period, in the micro-zone Tsinandali. Maximum of precipitations (157 mm) take place in May, and minimum (28 mm) – in January.

Vine buds opening starts from mid-April, and the grape maturity begins in the second half of August.

Active heat sum ranges within 4100-3500°C, in Tsinandali micro-zone (on the 300-750 m level).

Hailing days are frequent per year (2,3). May and June are the most hailing months (0,7-0,8) of year and can be even 9 times in the most hailing years.

The relative humidity of air is approximately 70%. The air is less humid (60%) in August, and the most (77%) – in November.

The Western – (33%) and Eastern (23%) Rumb winds are dominated, in the micro-zone. The average wind speed is 1,7 m/s; amount of annual windy days is not big (10).

**SOIL** – In June-July of 2005, soil specialists of horticulture, Viticulture and Wine Science Research Institute conducted field and workshops on soils research, in order to study the microscopic soil cover. Analysis of soils was conducted at the same in Agrochemical Laboratory of Institute.

On the basis of existing researches, there are distinguished following varieties of soils:

1. Forest brown, very thick, moderately and very leptosol, heavy loam;
2. Brown, very thick, slightly leptosol, loam and clay;
3. Brown, moderately thick, slightly leptosol, heavy loam;
4. Meadow-brown, very thick, heavy loam and clay;
5. Meadow-brown, very thick, slightly and averagely leptosol, loam;
6. Deluvial proluvial, very thick, light and heavy loam;
7. Alluvial proluvial, very thick, slightly leptosol, loam;

8. Alluvial, very thick, heavy loam;
9. Alluvial, very thick, hard leptosol, loam.

Soils varieties are characterized in accordance of villages.

I – Vanta, Akura (plot nearby ruins), Kisiskhevi (plot above channel).

II – Busheti (plot bellow railway nearby Tetri Khidi, Shalauri (plot bellow the highway), Vachnadziani (plot "Khramitsebi").

III – village Shalauri (plot "Didi Verkhvis Adgilebi").

IV – villages: Tsinandali (plot "Teliani"), Kvemo Khodasheni (plot "Naparekhlebi"), Kurdghelauri (plot "Beghanapshebi").

V – Kvemo Khodasheni (plot "Didi Venakhebi").

VI and VII – on the line extended from said villages to Alazani Gorge.

VIII and IX – directly on the border of Alazani Terrace.

Brown soils presented in the upper part of the micro-zone (with sub-varieties) are characterized with medium and deep profile. Alluvial, alluvial-proluvial and deluvial-proluvial soils are characterized with deeper profile and various kinds of leptosol.

Soil thickness on upper part, wherein the brown soils are presented is 70-100 cm, and active humus layer is 30-50 cm; bellow, wherein alluvial, alluvial-proluvial and deluvial-proluvial soils are presented the soils are deeper – 100-150 cm, and active humus layer is 40-50 cm;

Soils mechanical content is characterized mainly with medium and heavy loamy composition, and soils with light clay – on small parts.

Humus is presented in small amount – within 1,0-2,5%, hydrolyzed nitrogen, soluble phosphorus and exchange potassium content is low, calcium carbonate soils contain them in small and medium amounts – within 2,5-16,0%, soil area reaction (pH) is averagely alkaline.

Soils presented in the micro-zone exclusively (mainly in the North-East and the East) with calcium carbonates content, leptosol and with climatic factors create perfect conditions for high quality wines preparation.

**HUMAN FACTOR** – History of viticulture and winemaking takes place from the depths of millennium in Kakheti and in the micro-zone Tsinandali, as in other parts of Georgia. In the course of time it was developed, grown and had taken experience.

At the beginning of the XIX century in Kakhetian prince's estates the viticulture and winemaking were important. Aleksandre Chavchavadze, who had special place among the nobles, borrowed a million rubles from the bank in 1835 to improve the estates. Large wine cellar with laboratory for winemaking was built in the village Tsinandali. Aleksandre Chavchavadze also built steam distillation factories for vodka.

This was the first attempt to move from the feudal rule to capitalistic, which effectively improved wine quality. Aleksandre Chavchavadze's wines were well known in Russia and appreciated in Europe, too.

From the 1880s, Princes Estates Department of the Russian Empire intensively purchased Georgian estates, about 2000 hectares of land in the village Tsinandali among them and its suburbs from the nobles – Chavchavadze, Andronikashvili, Zurabashvili, Bakhutov, Rotinyants, Aznaurov, etc. and began making massifs therefrom and reformation-reconstruction process.

Two-storeyed 150000 bucket cellar-factory and a palace were built, and was opened barrel workshop, in Tsinandali, in 1886-1887. New modern equipment was installed: grape presses, wine pumps, rubbles, tubs, barrels and various other inventories. Additionally, prince estates were staffed with professionals trained in Europe – Gogol-Janowski, Speshnev, Massono, Staroselskiy, Heine, Markovich, Ovcharenko, Tushmalishvili, Jorjadze, Dickinson and others.

From 1880, quite high quality wines were already produced there – "Rkatsiteli Tsinandali N13", "Green Tsinandali №14", "Saperavi Tsinandali №16" obtained the highest ratings at the International Exhibition of

Chicago, in 1892.

Three-year school was opened in Tsinandali, in 1897, where children were taught viticulture, winemaking and gardening, together with other subjects.

Wine TSINANDALI is produced since 1886. It is considered to be a flagship of Georgian wine. It has participated in numerous competitions and exhibitions and won 10 gold and 9 silver medals, until 1990.

The micro-zone Tsinandali geographical location, regional climate: mild winter and hot summer, moderate precipitations, diversity of soils, special features of Rkatsiteli and Saperavi varieties in this zone, and local centuries-old tradition of viticulture and winemaking define the unique organoleptic features of wine Tsinandali, characteristic only of this wine.

## **11. SPECIAL LABELING RULES:**

With Latin font – TSINANDALI

Protected Designation of Origin and/or PDO

Cyrillic font – ЦИНАНДАЛИ

Защищённое наименование места происхождения

## **12. ACCOUNTING AND NOTIFICATION**

Accounting and notification of production and storage technological processes of "Tsinandali" is carried out, in accordance with the rules established by the legislation of Georgia.

## **13. MAIN CONTROLLABLE POINTS**

During control of the PDO wine TSINANDALI production process the producer shall satisfy the requirements established by LEPL National Wine Agency, and shall comply with the following



parameters:

Main Controllable Points	Evaluation Methods
1	2
Vineyard location	Cadaster map, control on the place
Area	Vineyard accounting magazine, cadaster
Vine variety	Vineyard accounting journal, control on the place

1	2
Cultivation methods	Journal of registration of Agrotechnical Measures, treating journal, control on the place
Vintage and transportation	Vintage journal
Grape harvest per ha	Vintage journal
Grape harvest in total	Vintage journal
Grape processing and winemaking	Grape receiving journal, grape processing journal, product turnover calculation journal, laboratory analysis journals, notifications, control on the place
Wine bottling, packaging and storage place and conditions	Bottling journal, journal for motion of ready product in the storehouse, laboratory analysis journals
Physico-chemical characteristics of the wine at winemaking, before and after bottling	Laboratory analysis journals
Organoleptic characteristics of the wine	Tasting commission protocols
Traceability	Technological and laboratory records

#### 14. CONTROL BODY OF PRODUCTION

State control for observance of production specification and lawful usage of the appellation of origin PDO shall be carried out by LEPL National Wine Agency, according to the rules established by the legislation of Georgia.

