

Dlpa

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **45**
- SRM **7**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **0 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **28.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **74 C**, Time **15 min**

Mash step by step

- Heat up **20.6 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **74C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (58.5%)	80 %	5
Grain	Viking Wheat Malt1	1 kg (11.7%)	83 %	5
Grain	Monachijski	1 kg (11.7%)	80 %	16
Grain	Płatki owsiane	1 kg (11.7%)	85 %	3
Grain	Karmelowy Czerwony	0.25 kg (2.9%)	75 %	59
Sugar	cukier	0.3 kg (3.5%)	100 %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	10 g	60 min	10 %
Boil	Cascade	30 g	60 min	6 %
Boil	Amarillo	20 g	60 min	9.5 %
Aroma (end of boil)	Mosaic	25 g	15 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	fermentis