

piotra

- Gravity **12.6 BLG**
- ABV ---
- IBU **22**
- SRM **29.6**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **10 %**
- Size with trub loss **66 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **71 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **55.5 liter(s)**
- Total mash volume **74 liter(s)**

Steps

- Temp **62 C**, Time **90 min**
- Temp **72 C**, Time **90 min**
- Temp **99 C**, Time **60 min**

Mash step by step

- Heat up **55.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **90 min** at **62C**
- Keep mash **90 min** at **72C**
- Keep mash **60 min** at **99C**
- Sparge using **34 liter(s)** of **76C** water or to achieve **71 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	10.5 kg (56.8%)	80 %	16
Grain	Castle Abbey Malt	3 kg (16.2%)	75 %	45
Grain	Melanoiden Malt	2 kg (10.8%)	80 %	39
Grain	Special B Malt	2 kg (10.8%)	65.2 %	315
Grain	Pszoniczny	1 kg (5.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Cascade	7 g	20 min	6 %
Boil	Simcoe	20 g	50 min	13 %
Boil	Hallertau	7 g	15 min	4.5 %
Boil	Marynka	30 g	50 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	33 g	Danstar