

Brygadowe

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **22**
- SRM **3.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.6 liter(s)**
- Total mash volume **14.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **70 C**, Time **10 min**

Mash step by step

- Heat up **10.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **70C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.75 kg (77.5%)	85 %	5
Grain	Płatki owsiane	0.55 kg (15.5%)	85 %	3
Grain	Strzegom Monachijski typ I	0.25 kg (7%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	11.6 %
Whirlpool	Pacifica (NZ)	10 g	30 min	4.8 %
Aroma (end of boil)	Hallertau tradition	10 g	15 min	3.8 %
Whirlpool	Hallertau tradition	20 g	30 min	3.8 %