

champion

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **59**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **23.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **74.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **23.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (35.1%)	81 %	4
Grain	Viking Pale Ale malt	2 kg (35.1%)	80 %	5
Grain	Pszeniczny	1 kg (17.5%)	85 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (8.8%)	79 %	22
Grain	Carahell	0.2 kg (3.5%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	30 g	60 min	11.6 %
Boil	Citra	15 g	60 min	14 %
Aroma (end of boil)	Citra	15 g	0 min	14 %
Aroma (end of boil)	Amarillo	30 g	0 min	8.8 %
Dry Hop	Citra	30 g	6 day(s)	14 %

Yeasts

Name	Type	Form	Amount	Laboratory
s05	Ale	Dry	11 g	---