

PIPA3

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **43**
- SRM **6.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.6 kg (66.7%)	80 %	4
Grain	Viking Pale Ale malt	0.9 kg (16.7%)	80 %	5
Grain	Monachijski	0.4 kg (7.4%)	80 %	16
Grain	Karmelowy Czerwony	0.5 kg (9.3%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10.5 %
Boil	Centennial	15 g	20 min	8.5 %
Boil	Ahtanum	15 g	10 min	3.4 %
Dry Hop	Centennial	15 g	5 day(s)	8.5 %
Dry Hop	Ahtanum	15 g	5 day(s)	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Spice	trawa cytrynowa	20 g	Boil	10 min
Water Agent	gips piwowarski	15 g	Mash	100 min
Water Agent	chlorek wapnia	10 g	Boil	60 min