

22.10.2023 - warszawa

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **37**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **89 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **11.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	3.5 kg (94.6%)	80.5 %	6
Grain	Pszeniczny	0.2 kg (5.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	12.1 %
Boil	Idaho 7	5 g	60 min	13.1 %
Boil	Idaho 7	20 g	10 min	13.1 %
Aroma (end of boil)	Idaho 7	24 g	1 min	13.1 %
Aroma (end of boil)	Cascade	20 g	1 min	6.5 %

Yeasts

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