

## KIELCE e.4 - 09.04.2022r.

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **30**
- SRM **4.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **9 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **16.6 liter(s)**

### Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **12.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (96.4%)	85 %	7
Grain	Pszeniczny	0.15 kg (3.6%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	10.6 %
Boil	Chinook	11 g	15 min	10.6 %
Aroma (end of boil)	Chinook	13 g	1 min	10.6 %
Aroma (end of boil)	Cascade	35 g	1 min	8.1 %
Dry Hop	Chinook	20 g	3 day(s)	10.6 %
Dry Hop	Cascade	20 g	3 day(s)	8.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Notes

- 13 BLg // 20.5 litra

Zeszło do 2.2 BLG

17.05. butelkowanie ze 105 gramami cukru

*May 17, 2022, 9:39 AM*