

## Apka nr 3

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **57**
- SRM **4.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	4.8 kg (96%)	80.5 %	6
Grain	Płatki owsiane	0.2 kg (4%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	45 min	12 %
Boil	Cascade	25 g	45 min	6 %
Aroma (end of boil)	Cascade	20 g	5 min	6 %
Aroma (end of boil)	Citra	25 g	5 min	12 %
Whirlpool	Citra	30 g	20 min	12 %
Whirlpool	Cascade	20 g	20 min	6 %
Dry Hop	Chinook	10 g	5 day(s)	13 %
Dry Hop	Amarillo	60 g	5 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	4 g	Mash	30 min
Fining	Irish Moss	5 g	Boil	15 min