

## Resztkowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **60**
- SRM **24.8**
- Style **Brown IPA**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.2 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (61.1%)	80 %	5
Grain	Biscuit Malt	0.3 kg (4.6%)	79 %	45
Grain	Pszeniczny	0.6 kg (9.2%)	85 %	4
Grain	Abbey Malt Weyermann	0.5 kg (7.6%)	75 %	45
Grain	Carahell	0.25 kg (3.8%)	77 %	26
Grain	Caraaroma	0.3 kg (4.6%)	78 %	400
Grain	Barwiący	0.1 kg (1.5%)	55 %	985
Grain	Strzegom pszenica prażona	0.2 kg (3.1%)	70 %	1000
Grain	Karmelowy Pszeniczny Strzegom	0.3 kg (4.6%)	79 %	130

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	30 min	11 %
Boil	lunga	50 g	15 min	11 %
Dry Hop	Lublin (Lubelski)	50 g	10 day(s)	4 %

## Yeasts

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