

## #148 Próby obciążeniowe wiaduktu na Przybyszewskiego

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **42**
- SRM **6.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **20.7 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **23.4 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.04 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **75.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale	4 kg (87%)	80 %	5
Grain	Viking Cookie	0.3 kg (6.5%)	73 %	80
Grain	Viking karmelowy	0.3 kg (6.5%)	73 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger UK 2021	50 g	40 min	8 %
Aroma (end of boil)	East Kent Goldings UK 2020	50 g	1 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	30 ml	Fermentis