

## Kraków E. 25 - 24.03.2024

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **5.6**
- Style **Extra Special/Strong Bitter (English 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 **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **1 min**

### Mash step by step

- Heat up **12.6 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 **77C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.8 kg (90.5%)	80 %	5
Grain	Cookie Viking Malt	0.4 kg (9.5%)	72 %	50

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	21 g	60 min	12.5 %
Boil	East Kent Goldings	20 g	10 min	3.8 %
Aroma (end of boil)	East Kent Goldings	30 g	1 min	3.8 %

### Yeasts

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