

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **41**
- SRM **5.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.3 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18.5 liter(s)**

### Steps

- Temp **68 C**, Time **30 min**
- Temp **73 C**, Time **30 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76.9C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **73C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (60%)	82 %	4
Grain	Strzegom Monachijski typ I	2 kg (40%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Marynka	20 g	10 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	200 g	1 min	4 %

### Yeasts

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