

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **30**
- SRM **6.1**
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **27.1 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **14.2 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**

### Mash step by step

- Heat up **10.1 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (79%)	80 %	5
Grain	Pszeniczny	0.6 kg (14.8%)	85 %	4
Grain	Strzegom Karmel 150	0.25 kg (6.2%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	90 g	1 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Suche do fermentora