

east

- Gravity **12.4 BLG**
- ABV ---
- IBU **26**
- SRM **6**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **53 C**, Time **15 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (66.7%)	81 %	4
Grain	Monachijski	1 kg (22.2%)	80 %	16
Grain	Briess - Pale Ale Malt	0.5 kg (11.1%)	80 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	8.7 %
Boil	Lublin (Lubelski)	20 g	20 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	---