

1 na 100

- Gravity **6.3 BLG**
- ABV **2.4 %**
- IBU **24**
- SRM **7.4**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **22.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	1 kg (33.3%)	85 %	8
Grain	Viking Pale Ale malt	1 kg (33.3%)	80 %	5
Grain	Pszeniczny	0.5 kg (16.7%)	85 %	4
Grain	Strzegom Karmel 150	0.5 kg (16.7%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Aroma (end of boil)	Citra	20 g	5 min	12 %
Dry Hop	citr	30 g	5 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12 g	Safale