

Świąteczny ale

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **38**
- SRM **37.6**
- Style **Specialty Beer**

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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **20.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (58.4%)	81 %	4
Grain	Viking Pale Ale malt	1.5 kg (21.9%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.3 kg (4.4%)	75 %	30
Grain	Strzegom Karmel 300	0.5 kg (7.3%)	70 %	299
Grain	Jęczmień palony	0.3 kg (4.4%)	55 %	985
Grain	Strzegom Barwiący	0.25 kg (3.6%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	90 min	5.5 %
Boil	Marynka	30 g	60 min	8 %

Yeasts

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