

Old ale

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **32**
- SRM **16.9**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.9 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **14.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Caraaroma	0.12 kg (2.4%)	78 %	400
Grain	Strzegom Karmel 150	0.3 kg (6%)	75 %	150
Grain	Viking Pale Ale malt	3 kg (60.4%)	80 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (10.1%)	79 %	22
Grain	Carafa II	0.05 kg (1%)	70 %	812
Grain	Strzegom Pilzneński	1 kg (20.1%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Boadicea	30 g	60 min	9 %