

## old ale

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **51**
- SRM **21**
- Style **Old Ale**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **7 %**
- Size with trub loss **17.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **25.4 liter(s)**

### Steps

- Temp **72 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **90 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **19.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (80.2%)	80 %	5
Grain	Abbey Castle	0.25 kg (3.6%)	80 %	45
Grain	Aromatic Malt	0.25 kg (3.6%)	78 %	51
Liquid Extract	cukier trzcinowy	0.5 kg (7.3%)	70 %	40
Grain	Weyermann Specjal W	0.25 kg (3.6%)	68 %	300
Grain	Carafa III specjal	0.11 kg (1.6%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	45 g	60 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
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Flavor	płatki dębowe po shery	25 g	Secondary	60 day(s)
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