

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **70**
- SRM **27.4**
- Style **American Amber Ale**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.375 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **16.2 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **12.5 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (67.4%)	80 %	5
Grain	VM Pale Cookie	0.35 kg (9.4%)	79 %	30
Grain	Płatki owsiane	0.3 kg (8.1%)	85 %	3
Grain	Monachijski	0.13 kg (3.5%)	80 %	16
Grain	Pszeniczny	0.13 kg (3.5%)	85 %	4
Grain	Strzegom Karmel 150	0.1 kg (2.7%)	75 %	150
Grain	Weyermann - Carafa III Special	0.2 kg (5.4%)	35 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	15 g	60 min	15.5 %
Boil	Galaxy	15 g	5 min	15.5 %
Whirlpool	Galaxy	30 g	20 min	15.5 %
Dry Hop	Galaxy	60 g	3 day(s)	15.5 %