

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **13**
- SRM **4.7**
- Style **American Amber Ale**

### Batch size

- Expected quantity of finished beer **7 liter(s)**
- Trub loss **5 %**
- Size with trub loss **7.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **9.9 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **7 liter(s)**
- Total mash volume **9 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **4.9 liter(s)** of **76C** water or to achieve **9.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszoniczny	1.4 kg (70%)	75 %	4
Grain	Płatki orkiszowe	0.4 kg (20%)	80 %	4
Grain	Pilznieński	0.1 kg (5%)	81 %	4
Grain	Pale Cookie VM	0.1 kg (5%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	3 g	60 min	13.3 %