

PIAT

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **4.7**
- 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 **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Abbey Castle	0.3 kg (10%)	80 %	30
Grain	Płatki owsiane	0.6 kg (20%)	85 %	3
Grain	Pilznieński	2.1 kg (70%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	7.4 %