

Forest 3

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **37**
- SRM **5.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **25.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.68 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **26.9 liter(s)**

Steps

- Temp **68 C**, Time **80 min**

Mash step by step

- Heat up **21.1 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (69.7%)	80 %	6
Grain	Weyermann pszeniczny jasny	0.5 kg (8.7%)	80 %	6
Grain	Monachijski	0.5 kg (8.7%)	80 %	16
Grain	Płatki owsiane	0.4 kg (7%)	85 %	3
Grain	Płatki pszeniczne	0.3 kg (5.2%)	85 %	3
Grain	Acid Malt	0.04 kg (0.7%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	10 g	60 min	7.3 %
Boil	Simcoe	20 g	20 min	12 %
Boil	Citra	20 g	15 min	13.4 %
Aroma (end of boil)	Simcoe	30 g	0 min	12 %
Aroma (end of boil)	Citra	30 g	0 min	13.4 %