

PAPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **44**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **77C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (55.6%)	80 %	5
Grain	Pilzneński	1.5 kg (33.3%)	81 %	4
Grain	Pszeniczny	0.5 kg (11.1%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	12 g	60 min	13 %
Boil	Citra	3 g	60 min	12 %
Boil	Citra	22 g	15 min	12 %
Boil	Lublin (Lubelski)	25 g	10 min	4 %
Boil	Lublin (Lubelski)	25 g	5 min	4 %
Boil	Citra	25 g	1 min	12 %
Dry Hop	Falconer's Flight	50 g	6 day(s)	10.5 %