PIPA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **44**
- SRM **4.5**
- 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 **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **45 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	2 kg *(31.3%)*	80 %	4
Grain	Słód pszeniczny Bestmalz	2 kg *(31.3%)*	82 %	5
Grain	Płatki pszeniczne	1.8 kg *(28.1%)*	85 %	3
Grain	Płatki owsiane	0.6 kg *(9.4%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	12 g	60 min	14 %
Boil	Citra	12 g	30 min	14.2 %
Boil	Mosaic	20 g	15 min	11.8 %
Boil	Cascade	20 g	1 min	5.5 %
Boil	Pacific Jade	10 g	1 min	12.4 %
Dry Hop	Citra	20 g	7 day(s)	14.2 %
Dry Hop	Pacific Jade	10 g	7 day(s)	12.4 %
Dry Hop	Cascade	10 g	7 day(s)	5.5 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Yeasts

Name	Type	Form	Amount	Laboratory
FM26 Belgijskie Pagórki	Ale	Liquid	30 ml	Fermentum Mobile