

PanilPan

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **40**
- SRM **5.3**
- Style **White IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **69 C**, Time **90 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **90 min** at **69C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.5 kg (54.3%)	85 %	7
Grain	Pszeniczny	1.4 kg (21.7%)	85 %	4
Grain	Acid Malt	0.05 kg (0.8%)	58.7 %	6
Adjunct	Płatki pszeniczne	0.5 kg (7.8%)	85 %	3
Grain	Płatki owsiane	0.5 kg (7.8%)	85 %	3
Grain	Strzegom Monachijski typ I	0.5 kg (7.8%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	40 min	13.3 %
Aroma (end of boil)	Perle (PL)	30 g	10 min	7 %
Aroma (end of boil)	Perle	20 g	5 min	7 %
Whirlpool	Cascade	50 g	0 min	7.3 %
Whirlpool	Mosaic	20 g	0 min	12.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	140 ml	Fermentum Mobile