

#1 Puławski z Citra

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **70**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **1 %**
- Size with trub loss **20.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (88.9%)	80 %	5
Grain	Viking Munich Malt	0.5 kg (11.1%)	78 %	18

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Herkules	55 g	60 min	7 %
Aroma (end of boil)	Citra	85 g	8 min	7 %
Whirlpool	Citra	30 g	8 min	12 %
Dry Hop	Citra	70 g	7 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Dry	11.5 g	Lallemand