

American India Pale Ale

- Gravity **15.2 BLG**
- ABV ---
- IBU **89**
- SRM **9.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (80.6%)	80 %	7
Grain	Strzegom Wiedeński	0.6 kg (9.7%)	79 %	10
Grain	Carahell	0.4 kg (6.5%)	77 %	26
Grain	Carared	0.2 kg (3.2%)	75 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	50 min	15 %
Aroma (end of boil)	Citra	50 g	5 min	13 %
Dry Hop	Citra	50 g	10 day(s)	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Slant	250 ml	Safale