

American India Pale Ale

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **46**
- SRM **5.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **16 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.6 kg (75.4%)	80 %	5
Grain	Monachijski	0.7 kg (11.5%)	80 %	16
Grain	Pszeniczny	0.6 kg (9.8%)	85 %	4
Grain	Karmelowy Jasny 30EBC	0.2 kg (3.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Simcoe	25 g	20 min	13.2 %
Boil	Simcoe	25 g	10 min	13.2 %
Aroma (end of boil)	Cascade	50 g	0 min	6 %
Dry Hop	Cascade	50 g	3 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale