

AIPA bez karmelu i innego badziewia

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **89**
- SRM **5.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6 kg (95.2%)	85 %	7
Sugar	Sugar, Table (Sucrose)	0.3 kg (4.8%)	100 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	60 min	13.5 %
Boil	Citra	15 g	20 min	12 %
Boil	Mosaic	15 g	20 min	10 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Aroma (end of boil)	Mosaic	20 g	0 min	10 %
Whirlpool	Citra	20 g	15 min	12 %
Whirlpool	Mosaic	20 g	15 min	10 %
Dry Hop	Citra	35 g	5 day(s)	12 %
Dry Hop	Mosaic	35 g	5 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis