

Lopar

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **11**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

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

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (54.5%)	81 %	4
Grain	Strzegom Pale Ale	2.5 kg (45.5%)	79 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	10 g	60 min	11 %
Aroma (end of boil)	Cascade	40 g	0 min	6 %
Aroma (end of boil)	Enigma (AUS)	10 g	0 min	17.2 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Aroma (end of boil)	Mosaic	20 g	0 min	10 %
Dry Hop	Mosaic	30 g	2 day(s)	10 %
Dry Hop	Citra	30 g	2 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale II	Ale	Liquid	200 ml	Wyeast Labs