Koncernowe

- Gravity **12.1 BLG**
- ABV **---**
- IBU **52**
- SRM **7.7**
- 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 **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	2 kg *(41.7%)*	81 %	5
Grain	Weyermann - Vienna Malt	2 kg *(41.7%)*	81 %	8
Grain	Pszeniczny	0.3 kg *(6.3%)*	85 %	4
Grain	Weyermann - Carared	0.25 kg *(5.2%)*	75 %	45
Grain	Biscuit Malt	0.25 kg *(5.2%)*	79 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	30 min	10 %
Boil	Centennial	20 g	30 min	10.5 %
Boil	Mosaic	20 g	10 min	10 %
Boil	Centennial	20 g	10 min	10.5 %
Aroma (end of boil)	Mosaic	25 g	0 min	10 %
Aroma (end of boil)	Citra	25 g	0 min	12 %
Dry Hop	Mosaic	25 g	5 day(s)	10 %
Dry Hop	Citra	25 g	5 day(s)	12 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	Whifloc	1 g	Boil	15 min