

#3_19_LowCitrusy_Pale_Ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **33**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **71 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **76.1C**
- Add grains
- Keep mash **90 min** at **71C**
- Keep mash **1 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Soufflet - Pale Ale	2.5 kg (52.1%)	80 %	7
Grain	Oats, Flaked	1 kg (20.8%)	80 %	2
Grain	Monachijski	1 kg (20.8%)	80 %	16
Grain	Weyermann pszeniczny jasny	0.2 kg (4.2%)	80 %	6
Grain	Carahell	0.1 kg (2.1%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Amarillo	20 g	70 min	9.5 %
Aroma (end of boil)	Amarillo	15 g	10 min	9.5 %
Whirlpool	Amarillo	15 g	15 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1 g	Boil	10 min
Spice	sok z cytryny	15 g	Mash	90 min