

American Wheat

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **39**
- SRM **5.6**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **55 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **63 C**, Time **15 min**
- Temp **71 C**, Time **45 min**
- Temp **77 C**, Time **2 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **15 min** at **63C**
- Keep mash **45 min** at **71C**
- Keep mash **2 min** at **77C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Wheat Malt	2 kg (33.9%)	85 %	5
Grain	Weyermann - Pale Ale Malt	2 kg (33.9%)	85 %	7
Dry Extract	Dry Extract (DME) - Light	1 kg (16.9%)	95 %	16
Dodawany tyle żeby dobić w okolice 13 blg, być może bez jeśli wydajność byłaby lepsza niż oczekiwana				
Grain	Wheat, Flaked	0.4 kg (6.8%)	77 %	4
Grain	Oats, Flaked	0.25 kg (4.2%)	80 %	2
Grain	Weyermann - Carapils	0.25 kg (4.2%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Aroma (end of boil)	Cascade	10 g	5 min	6 %
Aroma (end of boil)	Simcoe	10 g	5 min	13.2 %
Dry Hop	Citra	10 g	5 day(s)	12 %

Dry Hop	Cascade	10 g	5 day(s)	6 %
Dry Hop	Simcoe	10 g	5 day(s)	13.2 %
Dry Hop	Citra	10 g	2 day(s)	12 %
Dry Hop	Cascade	10 g	2 day(s)	6 %
Dry Hop	Simcoe	10 g	2 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	220 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	kwask mlekowy	5 g	Boil	60 min