2021 Apa

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **19**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **25.8 liter(s)**

Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.1666 kg *(80.6%)*	85 %	7
Grain	Weyermann - Pale Wheat Malt	0.5 kg *(9.7%)*	85 %	5
Grain	Płatki owsiane	0.5 kg *(9.7%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	15 g	60 min	11 %
Dry Hop	Nelson Sauvin	60 g	3 day(s)	11 %
Dry Hop	Nelson Sauvin	30 g	3 day(s)	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis