

APA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **48**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **17.4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **2 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (95.2%)	80 %	4
Grain	Weyermann - Carapils	0.25 kg (4.8%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	60 min	9.7 %
Boil	Simcoe	15 g	40 min	13.3 %
Boil	Mosaic	10 g	20 min	11.8 %
Boil	Centennial	15 g	5 min	9.7 %
Boil	Centennial	25 g	0 min	9.7 %
Boil	Mosaic	35 g	0 min	11.8 %
Boil	Simcoe	35 g	0 min	13.3 %
Dry Hop	Simcoe	50 g	3 day(s)	13.3 %
Dry Hop	Centennial	25 g	3 day(s)	9.7 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	12 g	Mash	90 min