

APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **36**
- SRM **3.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	5 kg (100%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nectaron	30 g	30 min	12 %
Boil	Simcoe	25 g	2 min	12.7 %
Boil	Mosaic	25 g	2 min	12 %
Boil	Nectaron	20 g	2 min	12 %
75 C 15 min				
Whirlpool	Mosaic	25 g	0 min	10 %
75 C 15 min				
Whirlpool	Simcoe	25 g	0 min	13.2 %
75 C 15 min				
Dry Hop	Cryo Ekuanol	25 g	2 day(s)	20.6 %
Dry Hop	Nectaron	50 g	2 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	4 g	Mash	60 min
Fining	Whirlflock	2 g	Boil	10 min
Water Agent	Witamina C	4 g	Bottling	---