

Polish Hops APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **24**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **30 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **76C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	3 kg (46.9%)	81 %	5
Grain	Weyermann - Pale Ale Malt	2.2 kg (34.4%)	85 %	7
Grain	Weyermann - Pale Wheat Malt	1.2 kg (18.7%)	85 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	5 g	60 min	8.3 %
Boil	Oktawia	5 g	60 min	7.1 %
Boil	Junga	5 g	60 min	10.9 %
Aroma (end of boil)	Zula	15 g	10 min	8.3 %
Aroma (end of boil)	Oktawia	15 g	10 min	7.1 %
Aroma (end of boil)	Junga	15 g	10 min	10.9 %
Dry Hop	Zula	50 g	7 day(s)	8.3 %
Dry Hop	Oktawia	50 g	7 day(s)	7.1 %
Dry Hop	Junga	50 g	7 day(s)	10.9 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	Kwas mlekowy	4 g	Mash	60 min
Water Agent	Witamina C	4 g	Bottling	---