

Polskie APA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **68.7C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (88.9%)	82 %	4
Grain	Strzegom Karmel 30	0.5 kg (11.1%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	40 min	8 %
Boil	Lublin (Lubelski)	25 g	20 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	5 min	4 %
Dry Hop	Zula	50 g	3 day(s)	8.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	250 ml	Fermentis