

Jałowcowa APA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **33**
- SRM **9.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 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 **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (47.6%)	80 %	5
Grain	Viking Pilsner malt	2.5 kg (47.6%)	82 %	4
Grain	Strzegom Karmel 300	0.25 kg (4.8%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	15 g	15 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	15 g	5 min	15.5 %
Dry Hop	Columbus/Tomahawk/Zeus	25 g	5 day(s)	15.5 %
Dry Hop	Vic Secret	15 g	5 day(s)	16.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	---

Extras

Type	Name	Amount	Use for	Time
Spice	jałowiec	20 g	Boil	5 min
Spice	jałowiec	20 g	Secondary	5 day(s)
Spice	goździki	2 g	Boil	5 min