

APA

- Gravity **14.1 BLG**
- ABV ---
- IBU **47**
- SRM **6.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (60.6%)	81 %	4
Grain	Monachijski	0.25 kg (7.6%)	80 %	16
Grain	Strzegom Wiedeński	0.25 kg (7.6%)	79 %	10
Grain	Strzegom Karmel 30	0.3 kg (9.1%)	75 %	30
Grain	Barley, Flaked	0.2 kg (6.1%)	70 %	4
Grain	Pszoniczny	0.3 kg (9.1%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	60 min	12 %
Boil	Cascade	5 g	30 min	6 %
Boil	Citra	5 g	30 min	12 %
Aroma (end of boil)	Citra	5 g	15 min	12 %
Aroma (end of boil)	Amarillo	5 g	15 min	9.5 %
Whirlpool	Cascade	10 g	0 min	6 %
Dry Hop	Amarillo	10 g	7 day(s)	9.5 %
Dry Hop	Cascade	10 g	7 day(s)	6 %
Boil	Amarillo	5 g	30 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	60 min
Water Agent	gips piwowarski	2 g	Mash	60 min