

APA

- Gravity **11.9 BLG**
- ABV ---
- IBU **34**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.8 kg (88.4%)	81 %	4
Grain	Melanoiden Malt	0.25 kg (5.8%)	80 %	39
Grain	Strzegom Karmel 30	0.25 kg (5.8%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	60 min	13.4 %
Aroma (end of boil)	Mosaic	10 g	15 min	12 %
Aroma (end of boil)	Cascade	10 g	15 min	7 %
Aroma (end of boil)	Mosaic	10 g	5 min	12 %
Aroma (end of boil)	Cascade	10 g	5 min	6 %
Aroma (end of boil)	Centennial	25 g	0 min	10.5 %
Aroma (end of boil)	Cascade	25 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
us	Ale	Dry	11 g	---