

apa1

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **15**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (76.9%)	80 %	4
Grain	Karmelowy Jasny 30EBC	1 kg (15.4%)	75 %	30
Grain	Pszeniczny	0.5 kg (7.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Aroma (end of boil)	Citra	50 g	1 min	12 %
Whirlpool	Simcoe	50 g	---	13.2 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Slant	100 ml	---