

APA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **40**
- SRM **3.5**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (66.7%)	80 %	4
Grain	Viking Pale Ale malt	1 kg (22.2%)	80 %	5
Grain	Pszeniczny	0.5 kg (11.1%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	citra	15 g	30 min	12 %
Boil	Citra	10 g	15 min	12 %
Boil	Amarillo	10 g	15 min	9 %
Boil	Citra	10 g	10 min	12 %
Boil	Amarillo	10 g	5 min	9 %
Whirlpool	Amarillo	10 g	15 min	9 %
Whirlpool	Citra	15 g	15 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Dry	11 g	---