

Apa

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (90%)	80 %	4
Grain	Abbey Malt Weyermann	0.3 kg (6%)	75 %	45
Grain	Karmelowy Czerwony	0.2 kg (4%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Chinook	15 g	60 min	13 %
Whirlpool	Cascade PL	50 g	15 min	5.2 %
Whirlpool	Citra	50 g	15 min	12 %
Dry Hop	Lemon drop	50 g	3 day(s)	4.6 %
Dry Hop	Citra	50 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyesat 1272	Ale	Liquid	1500 ml	Starter