

AntAPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **3.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **7 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.9 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **66 C**, Time **55 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **55 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (80%)	80 %	4
Grain	Płatki owsiane	1 kg (20%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	50 min	11.5 %
Boil	Amarillo	10 g	50 min	7.1 %
Boil	Simcoe	10 g	15 min	11.5 %
Boil	Amarillo	10 g	15 min	7.1 %
Aroma (end of boil)	Simcoe	10 g	0 min	11.5 %
Aroma (end of boil)	Amarillo	10 g	0 min	7.1 %
Whirlpool	Simcoe	20 g	15 min	11.5 %
Whirlpool	Amarillo	20 g	15 min	7.1 %
Dry Hop	Simcoe	25 g	5 day(s)	11.5 %
Dry Hop	Amarillo	25 g	5 day(s)	7.1 %
Dry Hop	Simcoe	25 g	3 day(s)	11.5 %
Dry Hop	Amarillo	25 g	3 day(s)	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Liquid	1000 ml	Fermentum Mobile