

APA3

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **35**
- SRM **4.3**
- 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 **70 min**
- Evaporation rate **8 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (84.9%)	80 %	4
Grain	Carahell	0.5 kg (9.4%)	77 %	26
Grain	Weyermann - Carapils	0.3 kg (5.7%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	15.5 %
Boil	Simcoe	10 g	10 min	13.2 %
Boil	Cascade	10 g	10 min	5.8 %
Aroma (end of boil)	Simcoe	10 g	0 min	13.2 %
Aroma (end of boil)	Cascade	10 g	0 min	5.8 %
Dry Hop	Simcoe	30 g	4 day(s)	13.2 %
Dry Hop	Mosaic	30 g	4 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale