

APA 1

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **32**
- SRM **6.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **23.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.5 kg (86.1%)	85 %	7
Grain	Monachijski typ II 20-25 EBC Weyermann	0.5 kg (9.6%)	80 %	20
Grain	Weyermann - Caraamber	0.225 kg (4.3%)	75 %	65

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	30 min	10.5 %
Boil	Cascade	15 g	15 min	6 %
Whirlpool	Cascade	15 g	15 min	6 %
Dry Hop	Citra	30 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis