

APA

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **78**
- SRM **6.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **75 C**, Time **15 min**

Mash step by step

- Heat up **25.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **75C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	7 kg (82.4%)	85 %	7
Grain	Weyermann - Light Munich Malt	1 kg (11.8%)	82 %	14
Grain	Weyermann - Carapils	0.5 kg (5.9%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	50 g	60 min	12 %
Boil	Amarillo	30 g	30 min	9 %
Boil	Citra	30 g	30 min	12 %
Whirlpool	Cascade	10 g	0 min	6 %
Dry Hop	Citra	50 g	7 day(s)	12 %
Dry Hop	Amarillo	50 g	7 day(s)	9 %
Dry Hop	Centennial	50 g	7 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-5	Ale	Dry	11.5 g	---