

#3 Nothing fancy

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **41**
- SRM **5**
- 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 **18.4 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **69 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **18.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **69C**
- Keep mash **2 min** at **78C**
- 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	5 kg (95.2%)	85 %	7
Grain	Weyermann - Acidulated Malt	0.25 kg (4.8%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	35 g	60 min	10.5 %
Aroma (end of boil)	Cascade	30 g	5 min	6 %
Dry Hop	Centennial	15 g	2 day(s)	10.5 %
Dry Hop	Cascade	20 g	2 day(s)	6 %

Yeasts

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