

BA Pale Ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **31**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.8 kg (95%)	85 %	7
Grain	Carahell	0.2 kg (5%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Golding	20 g	60 min	5 %
Boil	Willamette	20 g	15 min	5 %
Boil	Willamette	10 g	5 min	5 %
Boil	Golding	10 g	5 min	5 %
Boil	Cascade	15 g	60 min	6 %
Dry Hop	Cascade	10 g	3 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis