

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 |