

14. Pale Ale

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **32**
- SRM **6.6**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7 %**
- Size with trub loss **22.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

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

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5.1 kg (84.9%) | 85 % | 7 |
| Grain | Munich Malt | 0.34 kg (5.7%) | 80 % | 18 |
| Grain | Weyermann - Melanoiden Malt | 0.34 kg (5.7%) | 81 % | 53 |
| Grain | Pszeniczny | 0.227 kg (3.8%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | horizon | 19 g | 60 min | 13 % |
| Boil | Cascade | 14 g | 10 min | 6 % |
| Boil | Centennial | 14 g | 10 min | 10.5 % |
| Aroma (end of boil) | Cascade | 14 g | 0 min | 6 % |
| Aroma (end of boil) | Centennial | 14 g | 0 min | 10.5 % |

Yeasts

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