

English Pale Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **19**
- SRM **5.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **15 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **15 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Maris Otter | 2 kg (57.1%) | 81 % | 6 |
| Grain | Viking Pale Ale malt | 1 kg (28.6%) | 80 % | 5 |
| Grain | Colorado Honig | 0.5 kg (14.3%) | 80 % | 13 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Target | 5 g | 60 min | 9 % |
| Boil | Challenger | 10 g | 30 min | 7 % |
| Boil | Fuggles | 15 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|--------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale | Liquid | 50 ml | Fermentum Mobile |