

## Forest brown ale

---

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- SRM **23**
- Style **American Brown Ale**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14.4 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **11.2 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield  | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (78.1%) | 80 %   | 5   |
| Grain | Biscuit Malt         | 0.3 kg (9.4%)  | 79 %   | 45  |
| Grain | Special B Malt       | 0.3 kg (9.4%)  | 65.2 % | 315 |
| Grain | Jęczmień palony      | 0.1 kg (3.1%)  | 55 %   | 985 |

### Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil                | lunga | 15 g   | 30 min | 11 %       |
| Aroma (end of boil) | lunga | 15 g   | 5 min  | 11 %       |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| kveik | Ale  | Slant | 10 ml  | ---        |

### Extras

| Type   | Name         | Amount | Use for   | Time     |
|--------|--------------|--------|-----------|----------|
| Flavor | pepy świerku | 200 g  | Boil      | 5 min    |
| Flavor | pepy świerku | 200 g  | Secondary | 2 day(s) |