

Brown Ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **27**
- SRM **13.4**
- Style **Northern English Brown Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **10 min**
- Temp **66 C**, Time **10 min**
- Temp **68 C**, Time **10 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.1 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **10 min** at **65C**
- Keep mash **10 min** at **66C**
- Keep mash **10 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (28%) | 80 % | 5 |
| Grain | Simpsons - Maris Otter | 1 kg (18.7%) | 81 % | 6 |
| Grain | Pilzneński | 1 kg (18.7%) | 81 % | 4 |
| Grain | Fawcett - Brown | 0.4 kg (7.5%) | 72 % | 180 |
| Grain | Abbey Malt Weyermann | 0.3 kg (5.6%) | 75 % | 45 |
| Grain | Oats, Flaked | 0.3 kg (5.6%) | 80 % | 2 |
| Grain | Monachijski | 0.3 kg (5.6%) | 80 % | 16 |
| Grain | Simpsons - Crystal Dark | 0.2 kg (3.7%) | 74 % | 158 |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (3.7%) | 73 % | 120 |
| Grain | Caramel/Crystal Malt - 60L | 0.15 kg (2.8%) | 74 % | 118 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Iunga | 15 g | 60 min | 11.5 % |
| Boil | Bramling | 20 g | 60 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------|------|--------|--------|------------|
| WLP007 - Dry English Ale Yeast | Ale | Liquid | 75 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------------|--------|---------|--------|
| Water Agent | Lactic Acid | 7 g | Mash | 60 min |
| Water Agent | CaSO ₄ | 7 g | Mash | 60 min |
| Fining | Whirlfloc-T | 2.5 g | Boil | 10 min |