

mr.brown

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **32**
- SRM **18**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Maris Otter Crisp | 5 kg (79.5%) | 83 % | 5 |
| Grain | Bestmalz Carmel Pils | 0.45 kg (7.2%) | 75 % | 5 |
| Grain | Caramel/Crystal Malt - 40L | 0.36 kg (5.7%) | 74 % | 75 |
| Grain | Brown Malt (British Chocolate) | 0.24 kg (3.8%) | 70 % | 1045 |
| Grain | brown malt | 0.24 kg (3.8%) | 70 % | 135 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Centennial | 20 g | 60 min | 9.5 % |
| Boil | Centennial | 30 g | 15 min | 9.5 % |
| Aroma (end of boil) | Centennial | 50 g | 2 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|------|--------|------------|
| WLP002 - English Ale Yeast | Ale | Dry | 20 g | White Labs |