

## Mild Ale

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **16**
- SRM **15.6**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.9 liter(s)**
- Total mash volume **14.6 liter(s)**

### Steps

- Temp **54 C**, Time **15 min**
- Temp **68 C**, Time **70 min**
- Temp **68 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **10.9 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **15 min** at **54C**
- Keep mash **15 min** at **68C**
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

| Type  | Name                    | Amount         | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Mild Malt               | 3 kg (82.2%)   | 80 %  | 8   |
| Grain | Crystal II 200          | 0.5 kg (13.7%) | 71 %  | 200 |
| Grain | Briess - Chocolate Malt | 0.15 kg (4.1%) | 60 %  | 690 |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Fuggles | 30 g   | 60 min | 4.5 %      |

### Yeasts

| Name                            | Type | Form | Amount | Laboratory      |
|---------------------------------|------|------|--------|-----------------|
| Mangrove Jack's -M15 Empire Ale | Ale  | Dry  | 10 g   | Mangrove Jack's |