

## Mild Ale

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- 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