# **English Brown Porter**

- Gravity 12.9 BLG
- ABV 5.2 %
- IBU **33**
- SRM **25.9**
- Style Brown Porter

#### **Batch size**

- Expected quantity of finished beer 18 liter(s)
- Trub loss 5 %
- Size with trub loss 18.9 liter(s)
- Boil time 70 min
- Evaporation rate 10 %/h
- Boil size 23.1 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 13.9 liter(s)
- Total mash volume 18.5 liter(s)

# **Steps**

- Temp 67 C, Time 90 min
  Temp 67 C, Time 10 min
- Temp 78 C, Time 5 min

# Mash step by step

- Heat up 13.9 liter(s) of strike water to 74.8C
- Add grains
- Keep mash 10 min at 67C
- Keep mash 90 min at 67C
- Keep mash 5 min at 78C
- Sparge using 13.8 liter(s) of 76C water or to achieve 23.1 liter(s) of wort

# **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.44 kg <i>(74.5%)</i>	80 %	5
Grain	Castle Cafe	0.48 kg <i>(10.4%)</i>	75.5 %	480
Grain	Caraaroma	0.4 kg (8.7%)	78 %	400
Grain	Carabelge	0.3 kg <i>(6.5%)</i>	80 %	30

#### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	52 g	60 min	4.5 %
Boil	Fuggles	24 g	10 min	4.5 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	