#### stout

- Gravity 15.4 BLG
- ABV 6.5 %
- IBU **34**
- SRM **30.1**
- Style Dry Stout

#### **Batch size**

- Expected quantity of finished beer 23 liter(s)
- Trub loss 5 %
- Size with trub loss 24.1 liter(s)
- · Boil time 90 min
- Evaporation rate 10 %/h
- Boil size 30.4 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 21 liter(s)
- Total mash volume 28 liter(s)

# **Steps**

- Temp **62 C**, Time **45 min** Temp **68 C**, Time **15 min**
- Temp **75** C, Time **10** min

# Mash step by step

- Heat up 21 liter(s) of strike water to 69C
- Add grains
- Keep mash 45 min at 62C
- Keep mash 15 min at 68C
- Keep mash 10 min at 75C
- Sparge using 16.4 liter(s) of 76C water or to achieve 30.4 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	6 kg (82.8%)	78 %	6
Grain	Chocolate Malt (UK)	0.3 kg <i>(4.1%)</i>	73 %	1060
Grain	Roasted Barley	0.2 kg <i>(2.8%)</i>	55 %	1220
Grain	Briess - Extra Special Malt	0.5 kg <i>(6.9%)</i>	73 %	130
Adjunct	rice hull	0.25 kg <i>(3.4%)</i>	%	

# Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	31 g	60 min	12.7 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
own blend	Ale	Dry	10 g	