# imperial stout

- Gravity 24.9 BLG
- ABV **11.6** %
- IBU **102**
- SRM **71.7**
- Style Russian Imperial Stout

#### **Batch size**

- Expected quantity of finished beer 11 liter(s)
- Trub loss 5 %
- Size with trub loss 11.6 liter(s)
- Boil time 90 min
- Evaporation rate 10 %/h
- Boil size 14.6 liter(s)

#### **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3.2 liter(s) / kg
- Mash size 20.1 liter(s)
- Total mash volume 26.4 liter(s)

#### **Steps**

- Temp 65 C, Time 75 min
  Temp 76 C, Time 10 min

### Mash step by step

- Heat up 20.1 liter(s) of strike water to 72C
- Add grains
- Keep mash 75 min at 65C
- Keep mash 10 min at 76C
- Sparge using **0.8 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

# **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	3 kg <i>(47.8%)</i>	78 %	6
Grain	Briess - Munich Malt 10L	1.5 kg <i>(23.9%)</i>	77 %	20
Grain	Oats, Flaked	0.13 kg <i>(2.1%)</i>	80 %	2
Grain	Caramel/Crystal Malt - 120L	0.35 kg <i>(5.6%)</i>	72 %	236
Grain	Weyermann - Carafa I	0.25 kg <i>(4%)</i>	70 %	690
Grain	Briess - Chocolate Malt	0.3 kg <i>(4.8%)</i>	40 %	980
Grain	Black Barley (Roast Barley)	0.45 kg <i>(7.2%)</i>	40 %	1200
Grain	Briess - Wheat Malt, White	0.3 kg <i>(4.8%)</i>	85 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	70 min	13.5 %
Boil	Columbus/Tomahawk/Zeus	35 g	70 min	15.5 %

### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	90 ml	Mangrove Jack's

# **Notes**

• 23.5 Blg not 25 Dec 15, 2018, 7:08 PM