## C&D no. 1 Scottish Ale

- Gravity 13.8 BLG
- ABV 5.7 %
- IBU **37**
- SRM **8.7**
- Style Strong Scotch Ale

#### **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 25.3 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 16.5 liter(s)
- Total mash volume 22 liter(s)

## **Steps**

- Temp 63 C, Time 30 min
  Temp 73 C, Time 30 min
- Temp 79 C, Time 10 min

## Mash step by step

- Heat up 16.5 liter(s) of strike water to 70.2C
- Add grains
- Keep mash 30 min at 63C
- Keep mash 30 min at 73C
- Keep mash 10 min at 79C
- Sparge using 14.3 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	pilsen malt	4 kg (72.7%)	80 %	4
Grain	Munich Malt	1 kg (18.2%)	80 %	18
Grain	Briess - Carabrown Malt	0.5 kg <i>(9.1%)</i>	79 %	108

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	50 min	10 %
Boil	Lublin (Lubelski)	30 g	20 min	4 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	11 g	Mangrove Jack's