## **Double Brown Porter**

- Gravity 23.3 BLG
- ABV 10.7 %
- IBU 29
- SRM **33.3**
- Style Brown Porter

## **Batch size**

- Expected quantity of finished beer 10 liter(s)
- Trub loss 10 %
- Size with trub loss 11 liter(s)
- · Boil time 90 min
- Evaporation rate 20 %/h
- Boil size 15.6 liter(s)

## **Mash information**

- Mash efficiency 65 %
- Liquor-to-grist ratio 2.5 liter(s) / kg
- Mash size 15 liter(s)
- Total mash volume 21 liter(s)

## **Steps**

- Temp 68 C, Time 50 min
  Temp 78 C, Time 1 min

# Mash step by step

- Heat up 15 liter(s) of strike water to 77.6C
- Add grains
- Keep mash 50 min at 68C
- Keep mash 1 min at 78C
- Sparge using 6.6 liter(s) of 76C water or to achieve 15.6 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	2.85 kg <i>(47.5%)</i>	81 %	4
Grain	Fawcett - Brown	0.9 kg <i>(15%)</i>	72 %	180
Grain	Weyermann - Chocolate Rye	0.15 kg <i>(2.5%)</i>	20 %	650
Grain	Cara Blonde - Castle Malting	0.3 kg <i>(5%)</i>	78 %	20
Grain	Cookies viking	1.5 kg <i>(25%)</i>	79 %	45
Grain	Enzymatyczny	0.3 kg <i>(5%)</i>	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	20 g	60 min	10.5 %

## **Yeasts**

Name	Туре	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Slant	250 ml	Wyeast Labs

## **Extras**

Туре	Name	Amount	Use for	Time
1 ypc	Italiic	Amount	030 101	

Flavor	Sól himalajska	5 g	Boil	5 min