## **Chocolate Stout**

- · Gravity 11 BLG
- ABV ----
- IBU **45**
- SRM **37.1**
- Style Sweet Stout

## **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 69 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 15 liter(s)
- Total mash volume 19.3 liter(s)

## Steps

- Temp 62 C, Time 25 min
  Temp 72 C, Time 40 min

## Mash step by step

- Heat up 15 liter(s) of strike water to 68C
- Add grains
- Keep mash 25 min at 62C
- Keep mash 40 min at 72C
- Sparge using 14.6 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński Viking	3.5 kg <i>(81.4%)</i>	82 %	4
Grain	Chocolate - Bestmalz	0.4 kg (9.3%)	75 %	1000
Grain	Caramel Munich Bestmalz	0.4 kg <i>(9.3%)</i>	80 %	85

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %

### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	

#### **Extras**

Туре	Name	Amount	Use for	Time
Flavor	Kakao	160 g	Boil	15 min
Flavor	Laktoza	400 g	Boil	15 min

# **Notes**

· Palone na 15 minut przed końcem zacierania.

