# TORF, POT, KREW I ŁZY

- Gravity 16.6 BLG
- ABV 7 %
- IBU 48
- SRM **31.2**
- Style Foreign Extra Stout

#### **Batch size**

- Expected quantity of finished beer 21 liter(s)
- Trub loss 5 %
- Size with trub loss 22.1 liter(s)
- · Boil time 60 min
- Evaporation rate 20 %/h
- Boil size 28.9 liter(s)

## **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 20.9 liter(s)
- Total mash volume 27.8 liter(s)

#### **Steps**

- Temp 62 C, Time 30 min
  Temp 72 C, Time 30 min
- Temp 76 C, Time 10 min

## Mash step by step

- Heat up 20.9 liter(s) of strike water to 69C
- Add grains
- Keep mash 30 min at 62C
- Keep mash 30 min at 72C
- Keep mash 10 min at 76C
- Sparge using 15 liter(s) of 76C water or to achieve 28.9 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Casle Malting Whisky Nature	4 kg (57.6%)	85 %	4
Grain	Viking Pale Ale malt	1 kg <i>(14.4%)</i>	80 %	5
Grain	Strzegom Monachijski typ II	0.7 kg (10.1%)	79 %	22
Grain	Żytni	0.7 kg (10.1%)	85 %	8
Grain	Briess - Midnight Wheat Malt	0.55 kg <i>(7.9%)</i>	55 %	1084

# Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Simcoe	15 g	15 min	13.2 %
Boil	Simcoe	15 g	5 min	13.2 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

### **Extras**

Туре	Name	Amount	Use for	Time
Spice	sól	20 g	Boil	10 min
Flavor	kawa	200 g	Secondary	7 day(s)
Flavor	tonka	15 g	Secondary	7 day(s)

# **Notes**

• To może być w pizdu sztos. Opcja - bretty... Jul 24, 2017, 1:03 AM