## RiS 2019 biab

- Gravity 27.4 BLG
- ABV 13.2 %
- IBU **36**
- SRM **33.4**
- Style Russian Imperial Stout

### **Batch size**

- Expected quantity of finished beer 15 liter(s)
- Trub loss 10 %
- Size with trub loss 16.5 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 19.8 liter(s)

# **Mash information**

- Mash efficiency 70 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 30.1 liter(s)
- Total mash volume 40.1 liter(s)

### **Steps**

• Temp 65 C, Time 120 min

# Mash step by step

- Heat up 30.1 liter(s) of strike water to 72.5C
- Add grains
- Keep mash 120 min at 65C
- Sparge using -0.3 liter(s) of 76C water or to achieve 19.8 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Caramel/Crystal Malt	1.45 kg <i>(14.5%)</i>	70 %	60
Grain	carmel armoma	0.75 kg <i>(7.5%)</i>	70 %	30
Grain	BESTMALZ - Best Wheat Malt	0.5 kg <i>(5%)</i>	82 %	4
Grain	Minch - Irish Craft Pale Ale Malt	7 kg (69.8%)	80 %	5
Grain	Chocolate - crushed grains	0.25 kg <i>(2.5%)</i>	50 %	1125
Grain	Weyermann - Carafa II	0.08 kg <i>(0.8%)</i>	70 %	1150

## **Hops**

Use for	Name	Amount	Time	Alpha acid
Boil	Huell Melon	37.27 g	50 min	7.5 %
Boil	Tradition	5.54 g	50 min	5.8 %
Boil	Equinox	7.18 g	50 min	13.4 %
Boil	Columbus/Tomahawk/Zeus	9.63 g	12 min	18.1 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	500 ml	Fermentum Mobile

# **Extras**

Туре	Name	Amount	Use for	Time
Spice	tonka	12.5 g	Secondary	7 day(s)