### Black IPA v3

- Gravity 15.9 BLG
- ABV **6.7** %
- IBU 83
- SRM **33.2**
- Style Black IPA

### **Batch size**

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 %
- Size with trub loss 22 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 26.4 liter(s)

### **Mash information**

- Mash efficiency 70 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 22.6 liter(s)
- Total mash volume 30.2 liter(s)

### **Steps**

- Temp 64 C, Time 60 min
  Temp 78 C, Time 10 min

## Mash step by step

- Heat up 22.6 liter(s) of strike water to 71.3C
- Add grains
- Keep mash 60 min at 64C
- Keep mash 10 min at 78C
- Sparge using 11.4 liter(s) of 76C water or to achieve 26.4 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg <i>(66.2%)</i>	80 %	4
Grain	Oats, Flaked	1.2 kg <i>(15.9%)</i>	80 %	2
Grain	Weyermann - Dehusked Carafa II	0.6 kg <i>(7.9%)</i>	30 %	1100
Grain	Castlemalting - Cara Clair	0.5 kg <i>(6.6%)</i>	78 %	4
Grain	Abbey Castle	0.25 kg <i>(3.3%)</i>	80 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	60 g	60 min	11.5 %
Boil	Książęcy	20 g	20 min	7 %
Whirlpool	Książęcy	60 g	20 min	7 %
Dry Hop	Exp 2/20	200 g	3 day(s)	11.5 %
Dry Hop	Chinook	50 g	3 day(s)	13 %
Dry Hop	Książęcy	100 g	3 day(s)	7 %

#### **Yeasts**

Name Type	Form	Amount	Laboratory
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Wyeast - 1272	Ale	Liquid	1500 ml	Wyeast Labs
American Ale II				

# **Extras**

Туре	Name	Amount	Use for	Time
Water Agent	CaCl2	7 g	Mash	60 min
Water Agent	Lactic Acid	7 g	Mash	60 min
Fining	Whirlfloc-T	2.5 g	Boil	10 min