### **Black IPA**

- Gravity 16.1 BLG
- ABV ---
- IBU **59**
- SRM **35.2**
- 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 19 liter(s)
- Total mash volume 25.4 liter(s)

#### **Steps**

- Temp **62 C**, Time **30 min** Temp **68 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

# Mash step by step

- Heat up 19 liter(s) of strike water to 69C
- Add grains
- Keep mash 30 min at 62C
- Keep mash 45 min at 68C
- Keep mash 1 min at 78C
- Sparge using 13.8 liter(s) of 76C water or to achieve 26.4 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg <i>(78.7%)</i>	85 %	7
Grain	Płatki owsiane	0.25 kg <i>(3.9%)</i>	85 %	3
Grain	Weyermann - Carafa III	0.25 kg <i>(3.9%)</i>	70 %	1400
Grain	Monachijski	0.6 kg <i>(9.4%)</i>	80 %	16
Grain	Caramel/Crystal Malt - 10L	0.25 kg <i>(3.9%)</i>	75 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	40 g	25 min	12 %
Boil	Citra	40 g	1 min	12 %
Boil	Chinook	30 g	20 min	13 %
Boil	Amarillo	30 g	0 min	9.5 %

### **Yeasts**

Name Typ	/pe	Form	Amount	Laboratory
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WLP001 - California Ale Slant 150 ml White Labs	
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