## **Endeavour Black IPA**

- · Gravity 14 BLG
- ABV 5.8 %
- IBU **41**
- SRM **25.3**
- Style Black IPA

### **Batch size**

- Expected quantity of finished beer 23 liter(s)
- Trub loss 4 %
- Size with trub loss 24.8 liter(s)
- · Boil time 65 min
- Evaporation rate 8 %/h
- Boil size 28.3 liter(s)

### **Mash information**

- Mash efficiency 70 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 19.5 liter(s)
- Total mash volume 26 liter(s)

### **Steps**

- Temp 62 C, Time 20 min
  Temp 72 C, Time 80 min
- Temp 78 C, Time 15 min

## Mash step by step

- Heat up 19.5 liter(s) of strike water to 69C
- Add grains
- Keep mash 20 min at 62C
- Keep mash 80 min at 72C
- Keep mash 15 min at 78C
- Sparge using 15.3 liter(s) of 76C water or to achieve 28.3 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Crisp Extra Pale Maris Oter	4 kg <i>(61.5%)</i>	85 %	3
Grain	Simpsons - Wheat Malt	1 kg <i>(15.4%)</i>	85 %	4
Grain	Płatki owsiane	0.5 kg <i>(7.7%)</i>	85 %	3
Grain	Chateau Wheat Blanc	0.45 kg <i>(6.9%)</i>	85 %	4
Grain	Weyermann - Roasted Barley	0.3 kg <i>(4.6%)</i>	80 %	1200
Grain	Simpsons - Brown cafe	0.25 kg <i>(3.8%)</i>	75 %	500

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	30 g	60 min	12.2 %
Aroma (end of boil)	Endeavour	50 g	5 min	8 %
Dry Hop	Endeavour	50 g	2 day(s)	8 %

## **Yeasts**

Name	Туре	Form	Amount	Laboratory
safale BE134	Ale	Slant	200 ml	

# **Extras**

Туре	Name	Amount	Use for	Time
Fining	protafloc	1 g	Boil	15 min