

# Black IPA

- Gravity **20.9 BLG**
- ABV **9.3 %**
- IBU **51**
- SRM **53.8**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **11.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.8 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **11.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **3.5 liter(s)** of **76C** water or to achieve **11.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (63.3%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	0.3 kg (7.6%)	68 %	1200
Grain	Pszeniczny	0.25 kg (6.3%)	85 %	4
Grain	Strzegom Monachijski typ II	0.25 kg (6.3%)	79 %	22
Grain	Strzegom Karmel 300	0.6 kg (15.2%)	70 %	299
Grain	Jęczmień palony	0.05 kg (1.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	10 g	60 min	14.6 %
Boil	Ella (AUS)	10 g	30 min	14.6 %
Aroma (end of boil)	Ella (AUS)	10 g	5 min	14.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis