

# BLACK IPA

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **51**
- SRM **39.5**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **25.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Golden Promise	5 kg (58.8%)	81 %	4
Grain	Strzegom Wiedeński	1 kg (11.8%)	79 %	10
Grain	Strzegom Pszeniczny	1 kg (11.8%)	81 %	6
Grain	Carafa III	0.5 kg (5.9%)	70 %	1034
Grain	Czekoladowy	0.5 kg (5.9%)	60 %	788
Grain	Płatki pszeniczne	0.5 kg (5.9%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	50 min	13 %
Boil	Simcoe	10 g	40 min	13.2 %
Boil	Citra	20 g	10 min	12 %
Aroma (end of boil)	Cascade	40 g	5 min	6 %
Aroma (end of boil)	Simcoe	20 g	5 min	13.2 %
Dry Hop	Cascade	10 g	3 day(s)	6 %
Dry Hop	Citra	30 g	3 day(s)	12 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %