

## Black IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **51**
- SRM **33.2**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Karmel 150	0.3 kg (3.8%)	75 %	150
Grain	Jęczmień niesłodowany	0.2 kg (2.5%)	75 %	2
Grain	Płatki owsiane	0.3 kg (3.8%)	85 %	3
Grain	Żytni	0.2 kg (2.5%)	85 %	8
Grain	Strzegom Czekoladowy jasny	0.4 kg (5.1%)	68 %	400
Grain	Viking Pale Ale malt	6 kg (75.9%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.3%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Boil	vital	30 g	60 min	12.71 %
Aroma (end of boil)	vital	20 g	5 min	12.71 %
Whirlpool	Amarillo	30 g	15 min	9.5 %
Whirlpool	Citra	20 g	15 min	12 %
Dry Hop	Amarillo	50 g	7 day(s)	9.5 %
Dry Hop	Citra	50 g	7 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	1000 ml	Fermentis