

## # 16 black ipa

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **70**
- SRM **36.6**
- Style **Black IPA**

### 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (50.8%)	79 %	6
Grain	Strzegom Monachijski typ II	2 kg (33.9%)	79 %	22
Grain	Strzegom Czekoladowy 1200	0.3 kg (5.1%)	68 %	1202
Grain	Słód Caramunich Typ II Weyermann	0.3 kg (5.1%)	73 %	120
Grain	Strzegom Barwiący	0.3 kg (5.1%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Mosaic	30 g	30 min	10.9 %
Aroma (end of boil)	Centennial	20 g	10 min	8.9 %
Dry Hop	Amarillo	70 g	7 day(s)	7.5 %
Dry Hop	Simcoe	30 g	7 day(s)	13.2 %