

Black IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **67**
- SRM **22.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **19.4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **50 C**, Time **5 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **5 min** at **50C**
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (75.8%)	79 %	6
Grain	Strzegom Bursztynowy	0.8 kg (12.1%)	70 %	49
Grain	Słód Caramunich Typ II Weyermann	0.4 kg (6.1%)	73 %	120
Grain	Caraaroma	0.15 kg (2.3%)	78 %	400
Grain	Strzegom Czekoladowy ciemny	0.15 kg (2.3%)	68 %	1200
Grain	Płatki owsiane	0.1 kg (1.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	40 min	11.8 %
Boil	Chinook	20 g	60 min	14.8 %
Boil	Cascade	20 g	10 min	7.1 %
Boil	Marynka	20 g	20 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	50 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	5 g	Boil	10 min