Black IPA

- Gravity **18.9 BLG**
- ABV **---**
- IBU **61**
- SRM **28.5**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **76C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg *(74.6%)*	79 %	6
Grain	Strzegom Wiedeński	1 kg *(14.9%)*	79 %	10
Grain	Biscuit Malt	0.5 kg *(7.5%)*	79 %	50
Grain	Strzegom Czekoladowy 1200	0.2 kg *(3%)*	68 %	1202

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Willamette	30 g	15 min	5 %
Boil	Citra	30 g	5 min	12 %
Dry Hop	Citra	30 g	7 day(s)	12 %

Yeasts

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