

Black Piter

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **69**
- SRM **34.3**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **5 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5.5 kg (85.9%)	79 %	6
Grain	Fawcett - Pale Chocolate	0.5 kg (7.8%)	71 %	600
Grain	Carafa II	0.2 kg (3.1%)	70 %	812
Grain	Carafa III	0.2 kg (3.1%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Simcoe	20 g	60 min	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	300 ml	Fermentum Mobile