

CyberHop

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **81**
- SRM **29.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **15.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **74 C**, Time **10 min**

Mash step by step

- Heat up **11.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **74C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	1 kg (26%)	81 %	4
Grain	Pale ale	1 kg (26%)	81 %	4
Grain	Jęczmień palony	0.35 kg (9.1%)	55 %	985
Grain	Pszeniczny	1 kg (26%)	85 %	4
Grain	Monachijski	0.5 kg (13%)	80 %	24

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	60 min	12 %
Boil	Idaho (USA)	10 g	60 min	12 %
Aroma (end of boil)	Citra	20 g	10 min	12 %
Aroma (end of boil)	Idaho (USA)	20 g	10 min	12 %
Aroma (end of boil)	Sabro	20 g	10 min	14.8 %
Whirlpool	Citra	45 g	0 min	12 %
Whirlpool	Sabro	30 g	0 min	14.8 %
Whirlpool	Idaho (USA)	20 g	0 min	12 %