

#TO_DO_Czarnolas

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **64**
- SRM **26**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	5 kg (83.3%)	80.5 %	4
Grain	Strzegom Karmel 600	0.3 kg (5%)	68 %	601
Grain	Pszeniczny	0.4 kg (6.7%)	85 %	4
Grain	Weyermann - Dehusked Carafa II	0.3 kg (5%)	70 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	30 g	60 min	11 %
Boil	Amarillo	25 g	30 min	9.5 %
Boil	Mandarina Bavaria	25 g	15 min	7.6 %
Boil	Mandarina Bavaria	25 g	2 min	7.6 %
Dry Hop	Mandarina Bavaria	50 g	3 day(s)	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	80 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	Rozmaryn świeży	10 g	Boil	30 min
Spice	Rozmaryn świeży	15 g	Boil	2 min
Spice	Trawa cytrynowa świeża	20 g	Boil	2 min