

American Black

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **50**
- SRM **32**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **20.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **20.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Mep	4 kg (80%)	80 %	5
Grain	Strzegom Karmel 150	0.2 kg (4%)	75 %	150
Grain	Słód pszeniczny Bestmalz	0.3 kg (6%)	82 %	5
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (4%)	73 %	1001
Grain	Carafa II	0.3 kg (6%)	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	40 min	12.1 %
Boil	Citra	15 g	40 min	13.7 %
Boil	Simcoe	15 g	10 min	12.1 %
Whirlpool	Azacca	20 g	---	14 %
Whirlpool	Citra	20 g	---	13.7 %
Whirlpool	Sorachi Ace	20 g	---	12.5 %
Dry Hop	Sorachi Ace	30 g	3 day(s)	12.5 %
Dry Hop	Citra	20 g	3 day(s)	13.7 %

Dry Hop	Azacca	30 g	3 day(s)	14 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis