

# black ipaa

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **95**
- SRM **56.4**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.2 liter(s)**
- Total mash volume **37.6 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	7 kg (74.5%)	79 %	6
Grain	Strzegom Karmel 600	1 kg (10.6%)	68 %	601
Grain	Jęczmień palony	0.2 kg (2.1%)	55 %	985
Grain	Płatki owsiane	0.2 kg (2.1%)	85 %	3
Grain	Strzegom Czekoladowy 1200	0.5 kg (5.3%)	68 %	1202
Grain	Strzegom Monachijski typ II	0.5 kg (5.3%)	79 %	22

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Simcoe	30 g	45 min	13.2 %
Boil	Chinook	30 g	30 min	13 %
Boil	Citra	20 g	15 min	12 %
Boil	Cascade	30 g	1 min	6 %
Dry Hop	Citra	30 g	5 day(s)	12 %
Dry Hop	Chinook	20 g	5 day(s)	13 %
Dry Hop	Cascade	20 g	5 day(s)	6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Flavor	płatki dębowe	50 g	Secondary	5 day(s)
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## Notes

- zacieranie:  
30min w 65 i 45min w 72  
*Aug 28, 2017, 7:52 PM*