

## #04 Black IPA (Cascadian Dark Ale)

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **68**
- SRM **52**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **33.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **33 liter(s)**

### Steps

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

### Mash step by step

- Heat up **24.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (68.6%)	81 %	4
Grain	Karmelowy Czerwony	1 kg (11.4%)	75 %	59
Grain	Strzegom Czekoladowy ciemny	0.25 kg (2.9%)	68 %	1200
Grain	Strzegom Barwiący	1 kg (11.4%)	68 %	1300
Słody ciemne daj albo pod koniec albo na początku zacierania.				
Sugar	cukier brązowy	0.5 kg (5.7%)	--- %	---
Cukier dodać na koniec gotowania				

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	citra	30 g	60 min	10.5 %
albo 40 g Marynki				
Boil	Mosaic	20 g	10 min	10 %
Boil	Simcoe	20 g	10 min	13.2 %
albo Fuggle albo E.K. Goldings				
Dry Hop	Citra	20 g	4 day(s)	12 %
Dry Hop	Mosaic	30 g	3 day(s)	10 %

Dry Hop	Simcoe	10 g	3 day(s)	13.2 %
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### Yeasts

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

### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	15 g	Boil	60 min