

## Black IPA #5

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **35**
- SRM **19.7**
- 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 **25 %/h**
- Boil size **21 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.7 liter(s)**

### Steps

- Temp **70 C**, Time **75 min**

### Mash step by step

- Heat up **10.1 liter(s)** of strike water to **78.9C**
- Add grains
- Keep mash **75 min** at **70C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **21 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.3 kg (63.9%)	79 %	6
Grain	Strzegom Pilzneński	1 kg (27.8%)	80 %	4
Grain	Caramel/Crystal Malt - 10L	0.1 kg (2.8%)	75 %	20
Grain	Carafa III	0.2 kg (5.6%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	25 g	60 min	9.5 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Aroma (end of boil)	Cascade	25 g	0 min	6 %
Dry Hop	Cascade	25 g	3 day(s)	6 %
Dry Hop	Citra	20 g	3 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar

### Extras

Type	Name	Amount	Use for	Time
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Fining	mech irlandzki	3 g	Boil	10 min
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