

Black_IPA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **25**
- SRM **28.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **7 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.5 kg (75.6%)	85 %	7
Grain	Jęczmień niesłodowany (płatki)	0.5 kg (8.4%)	72 %	2
Grain	Strzegom Monachijski typ II	0.45 kg (7.6%)	79 %	22
Grain	Black (Patent) Malt	0.3 kg (5%)	55 %	1200
Grain	Weyermann - Chocolate Wheat	0.2 kg (3.4%)	74 %	800

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cashmere	30 g	20 min	6.7 %
Boil	Cashmere	30 g	15 min	6.7 %
Aroma (end of boil)	Cashmere	20 g	5 min	6.7 %
Dry Hop	Cashmere	25 g	5 day(s)	6.7 %
Dry Hop	Cashmere	25 g	4 day(s)	6.7 %

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	50 ml	Fermentum Mobile