Black Ipa 39/68

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **55**
- SRM **25.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **27.4 liter(s)**
- Total mash volume **35.2 liter(s)**

Steps

- Temp **64 C**, Time **70 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **27.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **5 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6.25 kg *(76.9%)*	81 %	4
Grain	Strzegom Karmel 150	0.63 kg *(7.7%)*	75 %	30
Grain	Carafa II	0.63 kg *(7.7%)*	70 %	812
Grain	Biscuit Malt	0.31 kg *(3.8%)*	79 %	45
Sugar	Cukier brązowy	0.31 kg *(3.8%)*	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	40 g	60 min	8.5 %
Boil	Cascade	40 g	45 min	7.7 %
Boil	Fuggles	40 g	15 min	4.5 %
Boil	Cascade	40 g	1 min	7.7 %
Dry Hop	Cascade	20 g	4 day(s)	7.7 %
Dry Hop	Centennial	60 g	4 day(s)	10.5 %
Dry Hop	Fuggles	60 g	4 day(s)	4.5 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	150 ml	Fermentum Mobile