Black IPA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **58**
- SRM **28**
- 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 **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **62 C**, Time **60 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg *(86.5%)*	80 %	5
Grain	słód czerwony	0.2 kg *(3.8%)*	--- %	---
Grain	Strzegom Barwiący	0.1 kg *(1.9%)*	68 %	1300
Grain	Strzegom Czekoladowy 1200	0.2 kg *(3.8%)*	68 %	1202
Grain	Jęczmień palony	0.1 kg *(1.9%)*	55 %	985
Grain	słód karmelowy	0.1 kg *(1.9%)*	--- %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	120 g	60 min	4 %
Aroma (end of boil)	Saaz	25 g	10 min	2.3 %

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