

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 % |