

Black IPA

- Gravity **16.1 BLG**
- ABV ---
- IBU **90**
- SRM **72.9**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **13.8 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 | 3 kg (52.2%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ II | 1 kg (17.4%) | 79 % | 22 |
| Grain | Carafa III | 0.25 kg (4.3%) | 70 % | 1034 |
| Grain | Strzegom Czekoladowy 1200 | 0.5 kg (8.7%) | 68 % | 1202 |
| Grain | Strzegom Karmel 600 | 0.5 kg (8.7%) | 68 % | 601 |
| Grain | Weyermann - Carapils | 0.5 kg (8.7%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|-----------|------------|
| Boil | Mosaic | 20 g | 60 min | 11.7 % |
| Boil | Simcoe | 20 g | 50 min | 13.2 % |
| Boil | Mosaic | 20 g | 30 min | 11.7 % |
| Boil | Simcoe | 20 g | 15 min | 13.2 % |
| Aroma (end of boil) | Mosaic | 10 g | 5 min | 11.7 % |
| Aroma (end of boil) | Simcoe | 10 g | 5 min | 13.2 % |
| Dry Hop | Citra | 100 g | 10 day(s) | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |