

## Black IPA

- Gravity **18.9 BLG**
- ABV ---
- IBU **61**
- SRM **28.5**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **20.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **76C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount        | Yield | EBC  |
|-------|---------------------------|---------------|-------|------|
| Grain | Strzegom Pale Ale         | 5 kg (74.6%)  | 79 %  | 6    |
| Grain | Strzegom Wiedeński        | 1 kg (14.9%)  | 79 %  | 10   |
| Grain | Biscuit Malt              | 0.5 kg (7.5%) | 79 %  | 50   |
| Grain | Strzegom Czekoladowy 1200 | 0.2 kg (3%)   | 68 %  | 1202 |

### Hops

| Use for | Name       | Amount | Time     | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil    | Marynka    | 50 g   | 60 min   | 10 %       |
| Boil    | Willamette | 30 g   | 15 min   | 5 %        |
| Boil    | Citra      | 30 g   | 5 min    | 12 %       |
| Dry Hop | Citra      | 30 g   | 7 day(s) | 12 %       |

### Yeasts

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