

## #34 Black IPA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **65**
- SRM **29.5**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **23.2 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount        | Yield  | EBC |
|-------|----------------------------|---------------|--------|-----|
| Grain | Viking Pale Ale malt       | 2 kg (47.6%)  | 80 %   | 5   |
| Grain | Żytni                      | 1 kg (23.8%)  | 85 %   | 8   |
| Grain | Caraaroma                  | 0.2 kg (4.8%) | 78 %   | 400 |
| Grain | Strzegom Czekoladowy jasny | 0.3 kg (7.1%) | 68 %   | 400 |
| Grain | Carafa                     | 0.3 kg (7.1%) | 70 %   | 664 |
| Grain | Jęczmień palony            | 0.1 kg (2.4%) | 55 %   | 985 |
| Grain | Rye, Flaked                | 0.3 kg (7.1%) | 78.3 % | 4   |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Chinook | 20 g   | 60 min | 13 %       |
| Boil    | Mosaic  | 10 g   | 30 min | 10 %       |
| Boil    | Chinook | 10 g   | 30 min | 13 %       |
| Boil    | Chinook | 10 g   | 10 min | 13 %       |
| Boil    | Mosaic  | 10 g   | 10 min | 10 %       |
| Boil    | Chinook | 20 g   | 0 min  | 13 %       |
| Boil    | Mosaic  | 20 g   | 0 min  | 10 %       |

|         |         |      |          |      |
|---------|---------|------|----------|------|
| Dry Hop | Chinook | 40 g | 4 day(s) | 13 % |
| Dry Hop | Mosaic  | 60 g | 4 day(s) | 10 % |

### Yeasts

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

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g    | Boil    | 10 min |