

# Black Ipa V4

---

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **90**
- SRM **29.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.6 liter(s)**
- Total mash volume **18.2 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **13.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **15 min** at **76C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Castle Pale Ale                | 3 kg (65.9%)   | 80 %  | 8   |
| Grain | Pilzneński                     | 1 kg (22%)     | 81 %  | 4   |
| Grain | Carahell                       | 0.1 kg (2.2%)  | 77 %  | 26  |
| Grain | Jęczmień palony                | 0.1 kg (2.2%)  | 55 %  | 985 |
| Grain | Carafa II                      | 0.25 kg (5.5%) | 70 %  | 812 |
| Grain | Brown Malt (British Chocolate) | 0.1 kg (2.2%)  | 70 %  | 128 |

## Hops

| Use for             | Name                 | Amount | Time     | Alpha acid |
|---------------------|----------------------|--------|----------|------------|
| Boil                | Simcoe               | 20 g   | 60 min   | 12.5 %     |
| Boil                | Citra                | 20 g   | 30 min   | 12.5 %     |
| Aroma (end of boil) | Simcoe Citra Cascade | 30 g   | 5 min    | 12.5 %     |
| Whirlpool           | Simcoe Citra Cascade | 30 g   | 20 min   | 12 %       |
| Dry Hop             | Simcoe Citra Cascade | 30 g   | 3 day(s) | 12 %       |

## Yeasts

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| S-05        | Ale         | Dry         | 7 g           | ---               |