

# Black IPA

- Gravity **14.1 BLG**
- ABV ---
- IBU **85**
- SRM **33.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **13.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **24 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 3.5 kg (78.7%) | 85 %  | 7    |
| Grain | Pszeniczny                | 0.5 kg (11.2%) | 85 %  | 4    |
| Grain | Weyermann - Carafa III    | 0.25 kg (5.6%) | 70 %  | 1300 |
| Grain | Fawcett - Crystal         | 0.2 kg (4.5%)  | 70 %  | 150  |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Warrior  | 30 g   | 60 min   | 15.5 %     |
| Boil    | Amarillo | 30 g   | 30 min   | 9.2 %      |
| Boil    | Amarillo | 15 g   | 5 min    | 9.2 %      |
| Boil    | Simcoe   | 15 g   | 5 min    | 11.9 %     |
| Dry Hop | Simcoe   | 20 g   | 8 day(s) | 11.9 %     |
| Dry Hop | Amarillo | 20 g   | 8 day(s) | 9.2 %      |
| Dry Hop | Amarillo | 20 g   | 4 day(s) | 9.2 %      |
| Dry Hop | Simcoe   | 20 g   | 4 day(s) | 11.9 %     |

## 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 |