

# BLACK IPA

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- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **72**
- SRM **34**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **32.3 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.8 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **31.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield  | EBC  |
|-------|----------------------------|---------------|--------|------|
| Grain | Pale Ale                   | 7 kg (87.5%)  | 80 %   | 5    |
| Sugar | Cukier kandyzowany brązowy | 0.5 kg (6.3%) | 78.3 % | 542  |
| Grain | Carafa Special II          | 0.5 kg (6.3%) | 70 %   | 1100 |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Falconer's Flight | 45 g   | 60 min | 10.3 %     |
| Boil    | Falconer's Flight | 30 g   | 30 min | 10.3 %     |
| Boil    | Falconer's Flight | 25 g   | 15 min | 10.3 %     |
| Boil    | Falconer's Flight | 25 g   | 10 min | 10.3 %     |
| Boil    | Falconer's Flight | 25 g   | 5 min  | 10.3 %     |

## Yeasts

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