

# Black IPA

- Gravity **15.9 BLG**
- ABV ---
- IBU **51**
- SRM **39.1**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **53.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **35.7 liter(s)**
- Total mash volume **47.6 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **35.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **29.3 liter(s)** of **76C** water or to achieve **53.1 liter(s)** of wort

## Fermentables

| Type    | Name                      | Amount        | Yield | EBC  |
|---------|---------------------------|---------------|-------|------|
| Grain   | Strzegom Pale Ale         | 11 kg (88.7%) | 79 %  | 6    |
| Adjunct | Pszenica niesłodowana     | 0.5 kg (4%)   | 75 %  | 3    |
| Grain   | Strzegom pszenica prażona | 0.4 kg (3.2%) | 70 %  | 1000 |
| Grain   | Strzegom Barwiący         | 0.3 kg (2.4%) | 68 %  | 1300 |
| Grain   | Czekoladowy               | 0.2 kg (1.6%) | 60 %  | 788  |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 50 g   | 60 min | 15.7 %     |
| Aroma (end of boil) | Chinook                | 30 g   | 10 min | 11.2 %     |
| Aroma (end of boil) | Chinook                | 20 g   | 5 min  | 11.2 %     |
| Aroma (end of boil) | Simcoe                 | 20 g   | 5 min  | 11.4 %     |
| Aroma (end of boil) | Simcoe                 | 30 g   | 1 min  | 11.4 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | Fermentis  |