

# BLACK IPA #1

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **67**
- SRM **30.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pilsner malt         | 5 kg (86.2%)  | 82 %  | 4    |
| Grain | Weyermann - Carafa II       | 0.5 kg (8.6%) | 70 %  | 1100 |
| Grain | Weyermann - Melanoiden Malt | 0.2 kg (3.4%) | 81 %  | 53   |
| Grain | Strzegom Karmel 150         | 0.1 kg (1.7%) | 75 %  | 150  |

## Hops

| Use for    | Name       | Amount | Time     | Alpha acid |
|------------|------------|--------|----------|------------|
| Boil       | Centennial | 30 g   | 60 min   | 10 %       |
| Boil       | Cascade    | 50 g   | 45 min   | 5.8 %      |
| Boil       | Willamette | 30 g   | 15 min   | 5 %        |
| Dry Hop    | Cascade    | 50 g   | 2 day(s) | 6 %        |
| First Wort | Cukier     | 15 g   | 60 min   | 1 %        |

## Yeasts

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