

# BLACK IPA

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **76**
- SRM **35.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21.8 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC  |
|-------|----------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (66.7%)  | 80 %  | 5    |
| Grain | Strzegom Pilzneński  | 0.5 kg (6.7%) | 80 %  | 4    |
| Grain | Monachijski          | 1 kg (13.3%)  | 80 %  | 16   |
| Grain | Strzegom Karmel 300  | 0.4 kg (5.3%) | 70 %  | 300  |
| Grain | Carafa III           | 0.3 kg (4%)   | 70 %  | 1034 |
| Grain | słód chocolate       | 0.3 kg (4%)   | 60 %  | 1200 |

## Hops

| Use for | Name   | Amount | Time     | Alpha acid |
|---------|--------|--------|----------|------------|
| Boil    | Waimea | 20 g   | 60 min   | 17 %       |
| Boil    | Citra  | 25 g   | 30 min   | 14 %       |
| Boil    | Mosaic | 25 g   | 15 min   | 10 %       |
| Boil    | Simcoe | 25 g   | 10 min   | 13.2 %     |
| Boil    | Citra  | 25 g   | 5 min    | 14 %       |
| Dry Hop | Simcoe | 50 g   | 7 day(s) | 13.2 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |       |        |           |
|--------------|-----|-------|--------|-----------|
| Safale US-05 | Ale | Slant | 400 ml | Fermentis |
|--------------|-----|-------|--------|-----------|