

# Black IPA Classic

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **33**
- SRM **36.4**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.1 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 2.8 kg (42.9%) | 80 %  | 5    |
| Grain | Viking Pilsner malt         | 1.6 kg (24.5%) | 82 %  | 4    |
| Grain | Viking Wheat Malt           | 1.2 kg (18.4%) | 83 %  | 5    |
| Grain | Strzegom Karmel 600         | 0.4 kg (6.1%)  | 68 %  | 800  |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (6.1%)  | 68 %  | 800  |
| Grain | Jęczmień palony             | 0.08 kg (1.2%) | 55 %  | 1000 |
| Grain | Strzegom Barwiący           | 0.04 kg (0.6%) | 68 %  | 1300 |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Aroma (end of boil) | Amarillo | 20 g   | 15 min | 9.5 %      |
| Aroma (end of boil) | Cascade  | 38 g   | 15 min | 6 %        |
| Aroma (end of boil) | Ekuanot  | 20 g   | 15 min | 14 %       |