

# Black IPA

- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **81**
- SRM **40.5**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 3 kg (75%)     | 80 %  | 5   |
| Grain | Strzegom Karmel 300        | 0.5 kg (12.5%) | 70 %  | 299 |
| Grain | Strzegom Czekoladowy jasny | 0.3 kg (7.5%)  | 68 %  | 400 |
| Grain | Carafa II                  | 0.2 kg (5%)    | 70 %  | 812 |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Chinook  | 10 g   | 60 min   | 13 %       |
| Boil    | Citra    | 50 g   | 15 min   | 12 %       |
| Boil    | Amarillo | 30 g   | 5 min    | 8.5 %      |
| Dry Hop | Amarillo | 70 g   | 7 day(s) | 9.5 %      |
| Dry Hop | Citra    | 50 g   | 7 day(s) | 12 %       |

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US 05 | Ale  | Slant | 50 ml  | ---        |