

# BLACK IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **59**
- SRM **34.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **24 %/h**
- Boil size **24.3 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **20 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **20 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt   | 4 kg (74.1%)   | 85 %  | 7    |
| Grain | Weyermann pszeniczny jasny  | 0.8 kg (14.8%) | 80 %  | 6    |
| Grain | Weyermann - Carafa III      | 0.3 kg (5.6%)  | 70 %  | 1024 |
| Grain | Weyermann - Chocolate Wheat | 0.3 kg (5.6%)  | 74 %  | 788  |

## Hops

| Use for             | Name        | Amount | Time     | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil                | Sorachi Ace | 30 g   | 60 min   | 13.3 %     |
| Aroma (end of boil) | Książęcy    | 15 g   | 10 min   | 7 %        |
| Aroma (end of boil) | Sorachi Ace | 20 g   | 10 min   | 10 %       |
| Whirlpool           | Chinook     | 25 g   | 0 min    | 13 %       |
| Whirlpool           | Simcoe      | 25 g   | 0 min    | 13.2 %     |
| Dry Hop             | Chinook     | 25 g   | 3 day(s) | 13 %       |
| Dry Hop             | Simcoe      | 25 g   | 3 day(s) | 13.2 %     |
| Dry Hop             | Książęcy    | 35 g   | 3 day(s) | 7 %        |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale  | Slant | 200 ml | Lallemand  |