

# Black Ipa

- Gravity **14.6 BLG**
- ABV ---
- IBU **92**
- SRM **40**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale   | 5 kg (75.8%)   | 79 %  | 6   |
| Grain | Carafa II           | 0.7 kg (10.6%) | 70 %  | 812 |
| Grain | Biscuit Malt        | 0.2 kg (3%)    | 79 %  | 45  |
| Grain | Strzegom Karmel 150 | 0.5 kg (7.6%)  | 75 %  | 150 |
| Grain | Carahell            | 0.2 kg (3%)    | 77 %  | 26  |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Summit  | 50 g   | 60 min | 17 %       |
| Aroma (end of boil) | Cascade | 50 g   | 15 min | 6 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-05 | Ale  | Dry  | 11 g   | Safale     |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |       |      |        |
|--------|----------------|-------|------|--------|
| Flavor | płatki owsiane | 300 g | Mash | 50 min |
|--------|----------------|-------|------|--------|