

# Black IPA Centennial USA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **39**
- SRM **44.4**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount          | Yield | EBC  |
|-------|---------------------------|-----------------|-------|------|
| Grain | Strzegom Pale Ale         | 2.35 kg (69.2%) | 79 %  | 6    |
| Grain | Słód pszeniczny Bestmalz  | 0.325 kg (9.6%) | 82 %  | 5    |
| Grain | Carafa III                | 0.25 kg (7.4%)  | 70 %  | 1300 |
| Grain | Strzegom Czekoladowy 1200 | 0.17 kg (5%)    | 68 %  | 1200 |
| Grain | Jęczmień palony           | 0.08 kg (2.4%)  | 55 %  | 1000 |
| Grain | Płatki owsiane            | 0.1 kg (2.9%)   | 85 %  | 3    |
| Grain | Płatki pszeniczne         | 0.12 kg (3.5%)  | 85 %  | 3    |

## Hops

| Use for   | Name                | Amount | Time     | Alpha acid |
|-----------|---------------------|--------|----------|------------|
| Boil      | Centennial USA 2019 | 10 g   | 60 min   | 9.5 %      |
| Boil      | Centennial USA 2019 | 10 g   | 30 min   | 9.5 %      |
| Boil      | Centennial USA 2019 | 10 g   | 15 min   | 9.5 %      |
| Whirlpool | Centennial USA 2019 | 20 g   | 0 min    | 9.5 %      |
| Dry Hop   | Centennial USA 2019 | 50 g   | 4 day(s) | 9.5 %      |

## Yeasts

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| US-05 I     | Ale         | Slant       | 100 ml        | Safale            |