

# Black Ipa 1-800

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **44**
- SRM **27.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **12.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount          | Yield | EBC  |
|-------|------------------------|-----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 3.09 kg (70.4%) | 80 %  | 7    |
| Grain | Briess - Carapils Malt | 0.31 kg (7.1%)  | 74 %  | 3    |
| Grain | Pszeniczny             | 0.31 kg (7.1%)  | 85 %  | 4    |
| Grain | Carafa III             | 0.31 kg (7.1%)  | 70 %  | 1034 |
| Grain | płatki jęczmienne      | 0.24 kg (5.5%)  | 60 %  | 4    |
| Sugar | cukier                 | 0.13 kg (3%)    | 100 % | 1    |

## Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Marynka    | 6.19 g | 60 min   | 10 %       |
| Boil      | Centennial | 6.19 g | 30 min   | 10.5 %     |
| Boil      | Citra      | 6.19 g | 30 min   | 12 %       |
| Boil      | Citra      | 9.28 g | 15 min   | 12 %       |
| Boil      | Centennial | 9.28 g | 15 min   | 10.5 %     |
| Whirlpool | Centennial | 4.88 g | 30 min   | 10.5 %     |
| Whirlpool | Citra      | 4.88 g | 30 min   | 12 %       |
| Dry Hop   | Citra      | 7.51 g | 3 day(s) | 12 %       |
| Dry Hop   | Centennial | 7.51 g | 3 day(s) | 10.5 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 7.43 g | Fermentis  |