

# Black IPA 2 Extreme

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **124**
- SRM **19.6**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **6.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC  |
|-------|----------------------------|----------------|-------|------|
| Grain | Caramel/Crystal Malt - 10L | 0.17 kg (6.7%) | 75 %  | 20   |
| Grain | Pale Malt (2 Row) US       | 2 kg (78.4%)   | 79 %  | 4    |
| Grain | carafa special II          | 0.13 kg (5.1%) | 75 %  | 1150 |
| Sugar | cukier brazowy             | 0.25 kg (9.8%) | 100 % | 0    |

## Hops

| Use for | Name       | Amount | Time     | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil    | Marynka    | 35 g   | 60 min   | 10 %       |
| Boil    | Willamette | 15 g   | 15 min   | 5 %        |
| Boil    | Cascade    | 35 g   | 45 min   | 6 %        |
| Boil    | Cascade    | 35 g   | 1 min    | 6 %        |
| Boil    | Equinox    | 15 g   | 1 min    | 13.1 %     |
| Dry Hop | Cascade    | 70 g   | 4 day(s) | 6 %        |
| Dry Hop | Equinox    | 40 g   | 4 day(s) | 13.1 %     |
| Dry Hop | Willamette | 40 g   | 4 day(s) | 5 %        |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 5.5 g  | Fermentis  |

## Notes

- Zacieranie:  
Zacieramy jedynie jasne słozy. Suchą Carafe II dodajemy po zatarciu, do wysładzania.  
*Feb 13, 2019, 10:09 PM*
- Gotowanie:  
Cukier dodajemy w ostatniej minucie.  
*Feb 13, 2019, 10:09 PM*
- Ferm. burz. 7 dni w temp. 18-20 C.  
Ferm. cicha 10 dni w temp. 14-16 C, na ostatnie 4 dni chmiel.  
Refermentacja 14 dni w temp. 19-21 C.  
*Feb 13, 2019, 10:16 PM*