

# Black IPA II

---

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **44**
- SRM **33.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **14.6 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **74 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **74C**
- Keep mash **5 min** at **78C**
- Sparge using **5.1 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.4 kg (73.8%) | 80 %  | 5   |
| Grain | Pszeniczny           | 0.25 kg (7.7%) | 85 %  | 4   |
| Grain | Barwiący             | 0.25 kg (7.7%) | 55 %  | 985 |
| Grain | płatki jęczmienne    | 0.2 kg (6.2%)  | 60 %  | 4   |
| Grain | Strzegom Karmel 600  | 0.15 kg (4.6%) | 68 %  | 601 |

## Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Amarillo | 5 g    | 30 min | 10.1 %     |
| Boil      | Sabro    | 5 g    | 30 min | 14 %       |
| Boil      | Cascade  | 5 g    | 30 min | 6.5 %      |
| Boil      | Amarillo | 5 g    | 15 min | 10.1 %     |
| Boil      | Sabro    | 5 g    | 15 min | 14 %       |
| Boil      | Cascade  | 5 g    | 15 min | 6.5 %      |
| Whirlpool | Amarillo | 5 g    | 15 min | 10.5 %     |
| Whirlpool | Sabro    | 5 g    | 15 min | 14 %       |

|           |          |      |          |        |
|-----------|----------|------|----------|--------|
| Whirlpool | Cascade  | 5 g  | 15 min   | 6.5 %  |
| Dry Hop   | Amarillo | 35 g | 3 day(s) | 10.1 % |
| Dry Hop   | Sabro    | 35 g | 3 day(s) | 14 %   |
| Dry Hop   | Cascade  | 35 g | 3 day(s) | 6.5 %  |

## Yeasts

| Name         | Type | Form  | Amount  | Laboratory |
|--------------|------|-------|---------|------------|
| Safale US-05 | Ale  | Slant | 1000 ml | ---        |

## Notes

- Starter z gęstwy po IPA.  
*Jan 12, 2024, 8:09 AM*