

# Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **50**
- SRM **27.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

| Type  | Name        | Amount        | Yield | EBC  |
|-------|-------------|---------------|-------|------|
| Grain | Pilzneński  | 5 kg (71.4%)  | 81 %  | 4    |
| Grain | Carafa III  | 0.5 kg (7.1%) | 70 %  | 1034 |
| Grain | Pszeniczny  | 0.5 kg (7.1%) | 85 %  | 4    |
| Grain | Monachijski | 1 kg (14.3%)  | 80 %  | 16   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Citra    | 50 g   | 30 min   | 12 %       |
| Boil    | Amarillo | 30 g   | 10 min   | 9.5 %      |
| Dry Hop | Simcoe   | 75 g   | 3 day(s) | 13.2 %     |
| Dry Hop | Amarillo | 25 g   | 3 day(s) | 9.5 %      |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | ---        |

## Notes

- Carafa III - drobno zmielona, dodana na 10min przed zakończeniem zacierania.

*Jan 23, 2021, 12:30 PM*