

# Black IPA

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- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **79**
- SRM **33**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **28.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 7 kg (66.7%)  | 80 %  | 7   |
| Grain | Pszeniczny             | 1 kg (9.5%)   | 85 %  | 4   |
| Grain | Carafa II              | 0.5 kg (4.8%) | 70 %  | 812 |
| Sugar | strze                  | 1 kg (9.5%)   | --- % | --- |
| Grain | Strzegom Karmel 300    | 1 kg (9.5%)   | 70 %  | 299 |

## Hops

| Use for | Name                   | Amount | Time     | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 20 g   | 60 min   | 16.1 %     |
| Boil    | Magnum                 | 30 g   | 60 min   | 12.9 %     |
| Boil    | Chinook                | 50 g   | 30 min   | 8.5 %      |
| Boil    | Citra                  | 20 g   | 10 min   | 12.7 %     |
| Dry Hop | Cascade                | 50 g   | 2 day(s) | 6 %        |
| Dry Hop | Mosaic                 | 10 g   | 2 day(s) | 10 %       |