# 39 BLACK IPA

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- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **58**
- SRM **34.3**

## Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.4 liter(s)**

## Mash information

- Mash efficiency **73.2 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | Viking Pale Ale malt | 5.5 kg *(78.2%)* | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg *(14.2%)* | 79 % | 10 |
| Grain | Carafa III | 0.3 kg *(4.3%)* | 70 % | 1034 |
| Grain | Strzegom Barwiący | 0.23 kg *(3.3%)* | 68 % | 1300 |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | Magnum | 30 g | 50 min | 12.9 % |
| Boil | Chinook | 20 g | 45 min | 13 % |
| Boil | Citra | 10 g | 0 min | 12 % |
| Aroma (end of boil) | Cascade | 30 g | 0 min | 6 % |
| Dry Hop | Cascade | 30 g | 3 day(s) | 6 % |
| Dry Hop | Citra | 20 g | 3 day(s) | 12 % |
| Dry Hop | Chinook | 10 g | 3 day(s) | 13 % |

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.