

## #04 Black IPA (Cascadian Dark Ale)

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **68**
- SRM **52**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **33.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **33 liter(s)**

### Steps

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

### Mash step by step

- Heat up **24.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|---|-----------------------------|----------------|-------|------|
| Grain   | Pilzneński                  | 6 kg (68.6%)   | 81 %  | 4    |
| Grain   | Karmelowy Czerwony          | 1 kg (11.4%)   | 75 %  | 59   |
| Grain   | Strzegom Czekoladowy ciemny | 0.25 kg (2.9%) | 68 %  | 1200 |
| Grain   | Strzegom Barwiący           | 1 kg (11.4%)   | 68 %  | 1300 |
| Słody ciemne daj albo pod koniec albo na początku zacierania. |                             |                |       |      |
| Sugar   | cukier brązowy              | 0.5 kg (5.7%)  | --- % | ---  |
| Cukier dodać na koniec gotowania                              |                             |                |       |      |

### Hops

| Use for                        | Name                   | Amount | Time     | Alpha acid |
|--------------------------------|------------------------|--------|----------|------------|
| Boil                           | Columbus/Tomahawk/Zeus | 30 g   | 60 min   | 15.5 %     |
| Boil                           | citra                  | 30 g   | 60 min   | 10.5 %     |
| albo 40 g Marynki              |                        |        |          |            |
| Boil                           | Mosaic                 | 20 g   | 10 min   | 10 %       |
| Boil                           | Simcoe                 | 20 g   | 10 min   | 13.2 %     |
| albo Fuggle albo E.K. Goldings |                        |        |          |            |
| Dry Hop                        | Citra                  | 20 g   | 4 day(s) | 12 %       |
| Dry Hop                        | Mosaic                 | 30 g   | 3 day(s) | 10 %       |

|         |        |      |          |        |
|---------|--------|------|----------|--------|
| Dry Hop | Simcoe | 10 g | 3 day(s) | 13.2 % |
|---------|--------|------|----------|--------|

### Yeasts

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

### Extras

| Type        | Name            | Amount | Use for | Time   |
|-------------|-----------------|--------|---------|--------|
| Water Agent | gips piwowarski | 15 g   | Boil    | 60 min |