

#1 Black Hop Down

- Gravity **17.8 BLG**
- ABV ---
- IBU **93**
- SRM **40**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **27 liter(s)**

Steps

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

Mash step by step

- Heat up **20.3 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|------|
| Grain | Weyermann - Pale Ale Malt | 3.5 kg (51.9%) | 79 % | 7 |
| Grain | Weyermann - Rye Malt | 0.5 kg (7.4%) | 81 % | 8 |
| Grain | Special B Malt | 0.25 kg (3.7%) | 65.2 % | 315 |
| Grain | Carafa II | 0.25 kg (3.7%) | 65 % | 1000 |
| Grain | Weyermann - Chocolate Rye | 0.25 kg (3.7%) | 65 % | 700 |
| Grain | Weyermann - Chocolate Wheat | 0.5 kg (7.4%) | 74 % | 788 |
| Grain | Strzegom Monachijski typ II | 1 kg (14.8%) | 79 % | 22 |
| Grain | weyermann Carapils | 0.5 kg (7.4%) | 75 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | magnum | 40 g | 60 min | 13.5 % |
| Boil | Citra | 30 g | 30 min | 13.5 % |
| Boil | Equinox | 50 g | 5 min | 13.9 % |
| Dry Hop | Equinox | 50 g | 7 day(s) | 13.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |