

Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **58**
- SRM **45.7**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **52 C**, Time **5 min**
- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **22.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (66.7%) | 80 % | 5 |
| Grain | Płatki pszeniczne | 1 kg (13.3%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.5 kg (6.7%) | 85 % | 3 |
| Grain | Strzegom Czekoladowy ciemny | 1 kg (13.3%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Marynka | 70 g | 60 min | 10 % |
| Aroma (end of boil) | Citra | 50 g | 0 min | 12 % |
| Dry Hop | Citra | 50 g | 3 day(s) | 12 % |
| Dry Hop | Mosaic | 50 g | 2 day(s) | 10 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|-----------|----------|
| Flavor | Curacao | 50 g | Secondary | 2 day(s) |