

#9 Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **89**
- SRM **20.2**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 5.5 kg (75.3%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (13.7%) | 79 % | 10 |
| Grain | Carafa III | 0.3 kg (4.1%) | 70 % | 1034 |
| Grain | Płatki owsiane | 0.5 kg (6.8%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Magnum | 40 g | 60 min | 13.5 % |
| Boil | Chinook | 20 g | 45 min | 13 % |
| Boil | Cascade | 30 g | 15 min | 6 % |
| Boil | Chinook | 10 g | 15 min | 13 % |
| Whirlpool | Mosaic | 50 g | 10 min | 10 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 12 % |
| Dry Hop | Mosaic | 90 g | 3 day(s) | 10 % |

Yeasts

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