

Back in Black

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **38**
- SRM **25.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **55 min**
- Evaporation rate **10 %/h**
- Boil size **23.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **21.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 4.8 kg (79.6%) | 85 % | 7 |
| Grain | Munich Malt | 0.55 kg (9.1%) | 80 % | 18 |
| Grain | Słód Caramunich Typ II Weyermann | 0.34 kg (5.6%) | 73 % | 120 |
| Grain | Weyermann - Carafa III | 0.34 kg (5.6%) | 70 % | 1024 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 28 g | 55 min | 14.5 % |
| Aroma (end of boil) | Centennial | 57 g | 0 min | 7.8 % |
| Aroma (end of boil) | Columbus/Tomahawk/Zeus | 35 g | 0 min | 14.5 % |
| Dry Hop | Centennial | 57 g | 5 day(s) | 7.8 % |
| Dry Hop | Chinook | 57 g | 5 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US-05 | Ale | Slant | 300 ml | Safale |