

black ipa rakau single hop

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **48**
- SRM **39.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|--------|------|
| Grain | Viking Pale Ale malt | 4 kg (62.5%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (15.6%) | 79 % | 10 |
| Grain | Special B Malt | 0.5 kg (7.8%) | 65.2 % | 315 |
| Grain | Simpsons - Coffee Malt | 0.3 kg (4.7%) | 74 % | 296 |
| Grain | Carafa III | 0.2 kg (3.1%) | 70 % | 1034 |
| Grain | Barwiący | 0.4 kg (6.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Rakau (NZ) | 10 g | 60 min | 9.5 % |
| Boil | Rakau (NZ) | 40 g | 25 min | 9.5 % |
| Boil | Rakau (NZ) | 30 g | 15 min | 9.5 % |
| Boil | Rakau (NZ) | 20 g | 5 min | 9.5 % |
| Dry Hop | Rakau (NZ) | 100 g | 4 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|--------|--------|------------|
| FM53 Voss kveik | Ale | Liquid | 100 ml | FM |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Herb | mech irlandzki | 10 g | Boil | 15 min |
| Water Agent | gips | 10 g | Boil | 60 min |