

Black ipa

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **63**
- SRM **5.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **13.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.9 kg (86.6%) | 80 % | 5 |
| Grain | Viking Vienna Malt | 0.15 kg (4.5%) | 79 % | 7 |
| Grain | Viking Munich Malt | 0.15 kg (4.5%) | 78 % | 18 |
| Grain | płatki jęczmienne | 0.15 kg (4.5%) | 60 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Simcoe | 50 g | 10 min | 13.2 % |
| Boil | Mosaic | 25 g | 10 min | 10 % |
| Dry Hop | Ekuanot | 15 g | 3 day(s) | 14 % |
| Dry Hop | Centennial | 12 g | 3 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 10 g | Mangrove Jack's |