

Black IPA _

- Gravity **10 BLG**
- ABV **4 %**
- IBU **38**
- SRM **27.2**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **13.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (64.5%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (16.1%) | 85 % | 4 |
| Grain | Cara Gold | 0.25 kg (8.1%) | 75 % | 120 |
| Grain | Carafa III | 0.25 kg (8.1%) | 70 % | 1034 |
| Grain | Briess - Black Malt | 0.1 kg (3.2%) | 55 % | 1100 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil | Simcoe | 20 g | 20 min | 13.2 % |
| Boil | Simcoe | 10 g | 10 min | 13.2 % |
| Whirlpool | Simcoe | 20 g | 10 min | 13.2 % |
| Dry Hop | Simcoe | 100 g | 2 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 100 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|---------------------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 10 g | Boil | 10 min |
| Water Agent | Kwas fosforowy | 2 g | Boil | 60 min |
| Woda do wyśładzania | | | | |