

Black IPA #2

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **69**
- SRM **30**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **13.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.9 liter(s)**
- Total mash volume **14.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **13.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 2.85 kg (78.7%) | 80 % | 5 |
| Grain | Żytni | 0.4 kg (11%) | 85 % | 8 |
| Grain | Fawcett - Dark Crystal | 0.1 kg (2.8%) | 71 % | 300 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.22 kg (6.1%) | 73 % | 1001 |
| Grain | Weyermann - Carafa I | 0.05 kg (1.4%) | 70 % | 690 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Simcoe | 30 g | 60 min | 13.2 % |
| Aroma (end of boil) | Simcoe | 25 g | 0 min | 13.2 % |
| Aroma (end of boil) | Cascade | 25 g | 0 min | 6 % |
| Dry Hop | Cascade | 25 g | 3 day(s) | 6 % |
| Dry Hop | Sabro | 25 g | 3 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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|-----------------------------|-----|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 200 ml | Fermentum Mobile |
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