

Black IPA v1

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **60**
- SRM **37.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 3 kg (53.6%) | 80 % | 7 |
| Grain | Pilzneński | 1.5 kg (26.8%) | 81 % | 4 |
| Grain | Weyermann - Carapils | 0.5 kg (8.9%) | 78 % | 4 |
| Grain | Carafa II | 0.3 kg (5.4%) | 70 % | 812 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (5.4%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Boil | Amarillo | 10 g | 60 min | 9.5 % |
| Aroma (end of boil) | Amarillo | 20 g | 15 min | 9.5 % |
| Aroma (end of boil) | Chinook | 15 g | 10 min | 13 % |
| Aroma (end of boil) | Chinook | 15 g | 5 min | 13 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 12 % |
| Dry Hop | Mosaic | 30 g | 3 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------------|-------------|---------------|-------------------|
| FM52 Amerykański Sen | Ale | Liquid | 15 ml | Fermentum Mobile |