

BLACK IPA 17 BLG # 66

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **70**
- SRM **30**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 5.5 kg (85.9%) | 85 % | 7 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (4.7%) | 68 % | 1000 |
| Grain | Słód Caramunich Typ II Weyermann | 0.4 kg (6.3%) | 73 % | 110 |
| Grain | Weyermann - Carafa II | 0.2 kg (3.1%) | 70 % | 900 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Oktawia PH | 45 g | 45 min | 8.3 % |
| Boil | Zula PH | 30 g | 60 min | 8.3 % |
| Boil | Pałacowy PH | 20 g | 45 min | 7.7 % |
| Aroma (end of boil) | Izabella PH | 50 g | 0 min | 6.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 23 g | --- |