

#B012 BLACK IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **47**
- SRM **38.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (68%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (13.6%) | 79 % | 10 |
| Grain | Carafa II | 0.5 kg (6.8%) | 70 % | 812 |
| Grain | Barwiący | 0.5 kg (6.8%) | 55 % | 985 |
| Sugar | Brown Sugar, Dark | 0.35 kg (4.8%) | 100 % | 99 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Marynka | 20 g | 30 min | 10 % |
| Boil | Marynka | 20 g | 15 min | 10 % |
| Whirlpool | Citra | 20 g | 0 min | 12 % |