

#72 Black IPA SH Hallertau Blanc

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **58**
- SRM **39.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **10.55 liter(s)**
- Trub loss **4 %**
- Size with trub loss **11.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.95 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **35 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **13.1 liter(s)** of strike water to **69.6C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **35 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **4 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 2.04 kg (61.6%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (15.1%) | 85 % | 4 |
| Grain | Abbey Malt Weyermann | 0.24 kg (7.3%) | 75 % | 45 |
| Grain | Jęczmień niesłodowany | 0.19 kg (5.7%) | 75 % | 2 |
| Grain | Strzegom Barwiący | 0.34 kg (10.3%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|----------|------------|
| First Wort | Hallertau Blanc | 7 g | 50 min | 8.9 % |
| First Wort | lunga | 15 g | 50 min | 9.5 % |
| Aroma (end of boil) | Hallertau Blanc | 20 g | 8 min | 8.9 % |
| Whirlpool | Hallertau Blanc | 23.3 g | 15 min | 8.9 % |
| Dry Hop | Hallertau Blanc | 50 g | 3 day(s) | 8.9 % |

Yeasts

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

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|----------------------|-----|--------|-------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 30 ml | Fermentum Mobile |
|----------------------|-----|--------|-------|------------------|