

Hakuna matata - Black IPA (Sorachi Ace Single Hop)

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **60**
- SRM **21.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **18.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.5 kg (56.9%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (16.3%) | 79 % | 10 |
| Grain | Pszeniczny | 1 kg (16.3%) | 85 % | 4 |
| Grain | Weyermann - Carapils | 0.25 kg (4.1%) | 78 % | 4 |
| Grain | Weyermann - Dehusked Carafa III | 0.2 kg (3.3%) | 70 % | 1024 |
| Grain | Żytni | 0.1 kg (1.6%) | 85 % | 8 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.1 kg (1.6%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil | Sorachi Ace | 20 g | 60 min | 13 % |
| Boil | Sorachi Ace | 20 g | 20 min | 13 % |
| Boil | Sorachi Ace | 20 g | 10 min | 13 % |
| Aroma (end of boil) | Sorachi Ace | 20 g | 5 min | 13 % |
| Whirlpool | Sorachi Ace | 20 g | 5 min | 13 % |
| Dry Hop | Sorachi Ace | 50 g | 3 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 22 g | Fermentis |