

# 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