

Marine

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **65**
- SRM **5.1**
- Style **White 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (42.9%)	85 %	8
Grain	Weyermann pszeniczny jasny	3 kg (42.9%)	80 %	6
Grain	Płatki przenieiczne	1 kg (14.3%)	70 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	11.5 %
Boil	Pacifica	25 g	15 min	5 %
Boil	Sorachi Ace	25 g	15 min	10 %
Aroma (end of boil)	Pacifica	25 g	5 min	5 %
Aroma (end of boil)	Sorachi Ace	25 g	5 min	10 %
Dry Hop	Sorachi Ace	20 g	7 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	13.22 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	Curacao	28.75 g	Secondary	7 day(s)