

witi ma hoppi

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **15**
- SRM **4.3**
- Style **White IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **31.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **31.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	2 kg (26.7%)	81 %	4
Grain	Weyermann pszeniczny jasny	2 kg (26.7%)	80 %	6
Grain	Weyermann - Carapils	0.5 kg (6.7%)	78 %	4
Grain	Płatki owsiane	1 kg (13.3%)	60 %	3
Adjunct	Pszenica niestodowana	2 kg (26.7%)	75 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	lunga	5 g	70 min	12.4 %
Mash	Motueka	10 g	70 min	7.5 %
Mash	Wai-iti	10 g	70 min	2.7 %
Boil	Motueka	10 g	60 min	7.5 %
Boil	Wai-iti	10 g	60 min	2.7 %
Boil	Motueka	10 g	5 min	7.5 %

Boil	Wai-iti	10 g	5 min	2.7 %
Whirlpool	Motueka	20 g	20 min	7.5 %
Whirlpool	Wai-iti	20 g	20 min	2.7 %
Dry Hop	Motueka	50 g	3 day(s)	7.5 %
Dry Hop	Wai-iti	50 g	3 day(s)	2.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M21 Belgian Wit	Wheat	Dry	11 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	5 min
Spice	skórka gorzkiej pomarańczy	25 g	Boil	5 min
Spice	skórka słodkiej pomarańczy	15 g	Boil	5 min
Spice	rumianek	2 g	Boil	5 min
Other	łuska ryżowa	100 g	Mash	10 min