

spring ale

- Gravity **14 BLG**
- ABV ---
- IBU **51**
- SRM **6.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **4 min**
- Temp **44 C**, Time **12 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **12 min** at **44C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **4 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (57.1%)	85 %	7
Grain	Acid Malt	0.25 kg (4.8%)	58.7 %	6
Grain	Weyermann pszeniczny jasny	2 kg (38.1%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	25 g	60 min	8 %
Boil	Mosaic	25 g	50 min	8 %
Boil	Mosaic	10 g	20 min	10 %
Boil	Mosaic	10 g	5 min	10 %
Boil	Mosaic	5 g	1 min	10 %
Dry Hop	Mosaic	20 g	10 day(s)	10 %
Dry Hop	Mosaic	20 g	11 day(s)	10 %
Dry Hop	Mosaic	10 g	12 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Other	GIPS PIWOWARSKI	4 g	Mash	1 min
Other	MECH IRALNDZKI	3 g	Boil	5 min