

Witbier20_Bro

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **27**
- SRM **3.3**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **50 C**, Time **3 min**
- Temp **62 C**, Time **40 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **7 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **53.8C**
- Add grains
- Keep mash **3 min** at **50C**
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **73C**
- Keep mash **7 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	2.5 kg (58.1%)	80 %	4
Grain	Weyermann pszeniczny jasny	1.3 kg (30.2%)	80 %	6
Dry Extract	płatki pszeniczne	0.5 kg (11.6%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	30 g	60 min	5 %
Aroma (end of boil)	Willamette	10 g	25 min	5 %
Aroma (end of boil)	Sterling	15 g	25 min	4.5 %
Aroma (end of boil)	Sterling	15 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Safbrew

Extras

Type	Name	Amount	Use for	Time
Spice	curacao	20 g	Boil	25 min
Spice	Skórka pomarańczy	20 g	Boil	25 min
Spice	Kolendra	20 g	Boil	25 min