

Weizen dark

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **28**
- SRM **6.7**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **2 %**
- Size with trub loss **20.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.8 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.4 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (78.7%)	81 %	4
Grain	Pszeniczny	0.4 kg (9%)	85 %	4
Grain	Weyermann - Carawheat	0.35 kg (7.9%)	77 %	120
Grain	BESTMALZ - Best Pilsen	0.2 kg (4.5%)	80.5 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	40 g	60 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	40 g	15 min	4 %

Yeasts

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